



Reviewed: New iBook—Bigger Is Better

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APRIL 2002 NO. 68

Unleash Your Mac's

HIDDEN POWERS

**10 Easy Ways to
Hack Your Mac**

OS X vs. Windows XP

An unbiased debate (yeah, right)

Quark Pros Tell All

Top designers share their secrets

Customizing OS X

Personal icons, menus, and more

April Fools!

Pranks good enough to get you fired

REVIEWED:

Final Cut Pro 3, TurboTax Deluxe, Canvas 8, Virtual PC 5, Nikon Coolpix 5000, and more



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Bryce 5—3D software at its peak.



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highlights

20 Unleash Your Mac's Hidden Powers

Make your Finder snappier, speed up your broadband connection, customize your scroll bars—and much more. With a little sneaky tweaking, you can hack your Mac in under 10 minutes. We promise.

by Dave Hamilton

Beam me up, Stevie!



30 Quark Pros Tell All

Designers from *Entertainment Weekly*, *Men's Health*, and other top magazines—yeah, *MacAddict's* in there too—share their most productive tips for using the desktop publisher's tool of choice. by Robert Capps



The newest boy band is here: Meet the Backspace Boys.

36 April Fools!

It's that time of year again—time to use your mad tech skills for evil rather than good. Here are nine clever pranks to play on Mac lovers and Windows users alike. Just don't blame us if you lose a friend or a job—or both. by Alan Stafford



Look out, Mr. Gates!

40 Mac OS X vs. Windows XP

Want the most unbiased verdict on which OS is better? We give it to you straight. Almost.

by Ian Sammis and Will Smith

Your OS wears combat boots.



how to

66 Design a Mac OS X Icon

Get ready to pretty up that old display. Create your own photographic works of art in miniature to put a stamp of distinction on your desktop. by Jason Whong



Apple's new Pro Mouser.

68 Customize iTunes Remote

iTunes is great, but we'd like to give the player a makeover. Rather than hack the difficult iTunes interface, you can design unique skins for the shareware iTunes Remote, a customizable iTunes controller. by Jason Whong



Look out! Shark!

71 Make an OS X Slide-Show Screen Saver

Ladybugs, lagoons, and galaxies are nice, but why not take advantage of OS X's graphic routines and create a slide show of your own portfolio? Here's how. by Jason Whong



Here we have the home of William Randolph Megahertz.

72 Make Music Without Instruments

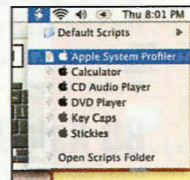
Digital music has come a long way since those Atari bleep tunes of yesteryear—many songs today are recorded without real instruments. How? Samples, baby! We show you how to create and use 'em to make your own music. by Jason Ditzian and Kris Fong



I'm getting my Mac together and taking it on the road.

78 Create an App-Launching Menu

One thing we miss in Mac OS X is the old Apple menu's app-launching capability. If you miss it too, get the scoop on how to bring it back by building a brand-new menu. by Jason Whong



Relive the past... well, sort of.

REPRINTS

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every month

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Dual gigs are great, but there's more to hope for.

8 The Disc

You'll find more than 40 must-have goodies on this month's Disc, including demos of the latest incarnation of Myth, the killer real-time strategy game; Canvas 8, the way-versatile OS X graphics app; Coldstone, a game-development tool for mere mortals; and SmartScore, a mind-boggling OCR app that turns sheet music into MIDI files.

10 Letters

The Apple logo appears on a pillow, we convert one guy to the gaming side, and another guy won't drink beer with a Wintel user.

12 Get Info

It's here! Take a sneak peek at Photoshop 7 for Mac OS X. Plus, Cheap Trick's Rick Nielsen divulges his shareware picks, a shareware app brings headline news to Mac OS X, and the Mac enables an 18-year-old to publish his first novel and a film director to make commercials for Radiohead.

18 Scrapbook

This month we decipher the video-cable conundrum and tell you which device uses which wires to display which kind of video on which display.

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64 Powerplay

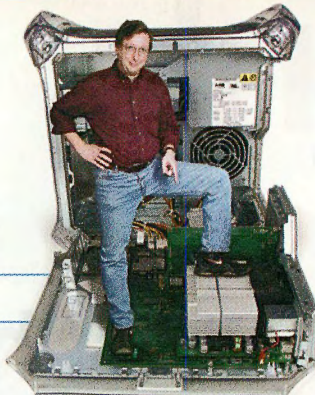
The Sims start dating, gods manipulate large furry animals, 4 million people are playing a medieval RPG—and that's just the beginning.

80 Ask Us

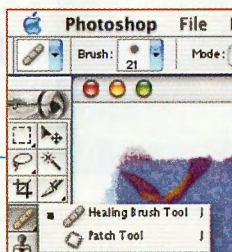
After switching to Mac OS X, your next step is making it your own. This month we show you how to create one-click access to the startup disk, find custom icons, get new system sounds, and conjure up a mini file server in Mac OS X. Plus, you can squeak extra bandwidth out of your Internet connection—and more.

96 Shut Down

Verb, plural noun, and type of liquid your way to unsophisticated amusement with our Mac-Your-Own-Adventure stories. Come up with something funny—or raunchy—enough, and we'll give you a prize.



Y'got this in a size G5?



Could it be...? Yes, it could. Something's coming, something good.



Just hand over that Dual 1GHz Power Mac, and no one gets hurt.

MacAddict

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editor's note

A message from the kernel.

Are you as sick and tired of all the "Megahertz! Megahertz! Megahertz!" brouhaha as I am? You should be—but not merely because your Mac's PowerPC processor can smoke an Intel Pentium running at twice the clock speed.

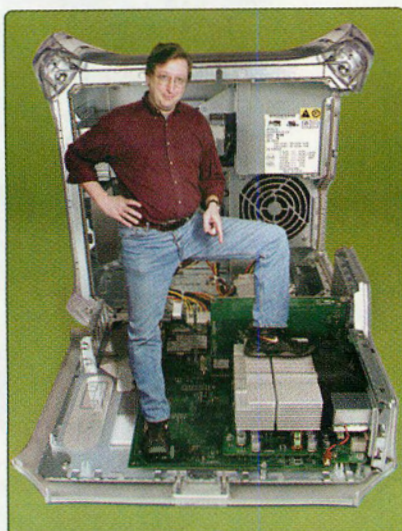
The real reason that clock speed is not a valid way to compare Macs and Wintel boxes is because there are a bazillion other factors that influence a system's performance.

And despite the recent upgrading of Apple's pro-level Power Mac G4 line (see "News Nook," p13), it's my painful duty to inform you that our Windows-saddled brethren are being treated to some technological advancements that haven't yet reached those of us fortunate enough to be basking in the cool-blue glory of Mac OS X.

Let's talk about the system bus, for example—the pathway between your Mac's processor and all of its other electronic goodies, especially RAM. A Power Mac G4's system bus purrs along at 133MHz (millions of cycles per second)—which sounds mighty speedy, especially when compared with the 8MHz bus in the original Mac. However, the system bus in a top-end Wintel box now zips along at the equivalent of 400MHz, thanks to a bit of electronic chicanery known as "quad pumping," which enables a 100MHz system bus to basically quadruple its data-transfer rate.

Were the recent Power Mac G4 improvements introduced so quietly because blockbuster news is coming in July?

And then there's the RAM with which the system bus is conversing. A Power Mac G4 tower's RAM is known as PC133 SDRAM (synchronous dynamic RAM) because its top rated speed is 133MHz. Reasonable for a 133MHz system bus, right? Well, yeah—but that top-end Wintel box is enjoying the benefits of either DRDRAM (direct Rambus dynamic RAM, named for the company that developed it), which can handle a quad-pumped system bus, or DDR (double data rate) SDRAM, which can perform two data operations in one clock



In an up-close-and-personal peek inside his Mac, Rik finds room for improvement.

cycle. Sorta makes PC133 SDRAM look a mite pokey, eh?

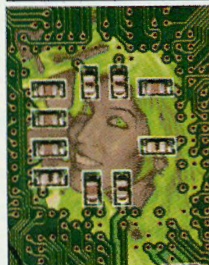
Just like their cache-equipped predecessors, the new 933MHz and dual-1GHz Power Mac G4 towers have level 3 caches of 2MB of DDR SDRAM per processor. This performance-enhancing cache is welcome, but some observers—count me in—are a bit puzzled as to why Apple hasn't gone all the way and moved to DDR SDRAM for the main system RAM in the pro Macs. It's my assumption—my wild guess, actually—that the PowerPC isn't yet ready for it.

And then there's the amount of RAM you can stuff into a Power Mac—it tops out at 1.5GB, while that Wintel beastie can handle a full 4GB. Wouldn't it be nice to have 4GB when plowing through all that RAM-devouring content-creation work for which the Mac is justly famous?

Now, don't think for a minute that I'm advocating a mass migration to Windows. Not for a moment—there's way too much about the Mac that keeps it head and shoulders above Wintel boxes. What I'm saying is that we have a lot to look forward to. Yes, Apple will undoubtedly treat the Power Mac G4 line to faster and faster processors—but there's still a lot of room for growth in the other electronic goodies that occupy its sleek silver belly. Were the recent Power Mac G4 improvements introduced so quietly because the real blockbuster news is coming at the Mac Expo in July? Would be nice.

—Rik Myslewski

Staff Rants



Kris Fong

Senioritis Editor

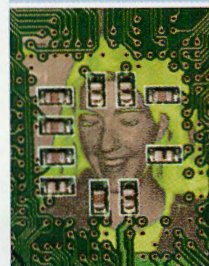
Q. What new features would you like to see in the next pro Power Macs?

A. A kernel-panic sensor that automatically dispatches

a superhuman Apple tech geek to my house to fix my Mac, plus built-in AV capabilities, a built-in cable and/or DSL modem, and 1GB of preinstalled SDRAM.

Q. What will be the most important announcement at the next Mac Expo?

A. Whatever follows these words in Steve Jobs's keynote: "And one more thing..."



Jenifer Morgan

Hub-byist

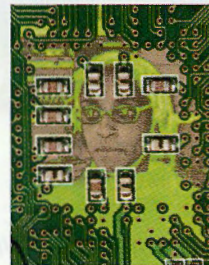
Q. What new features would you like to see in the next pro Power Macs?

A. A SuperDuperDrive that replicates digital cameras, iPods,

and other useful peripherals using free Titanium-ingot media.

Q. What will be the most important announcement at the next Mac Expo?

A. That the 2003 Mac Expos will be held in Maui, and that Apple will pay all editors' expenses.



Narasu Rebbapragada

News Wrangler

Q. What new features would you like to see in the next pro Power Macs?

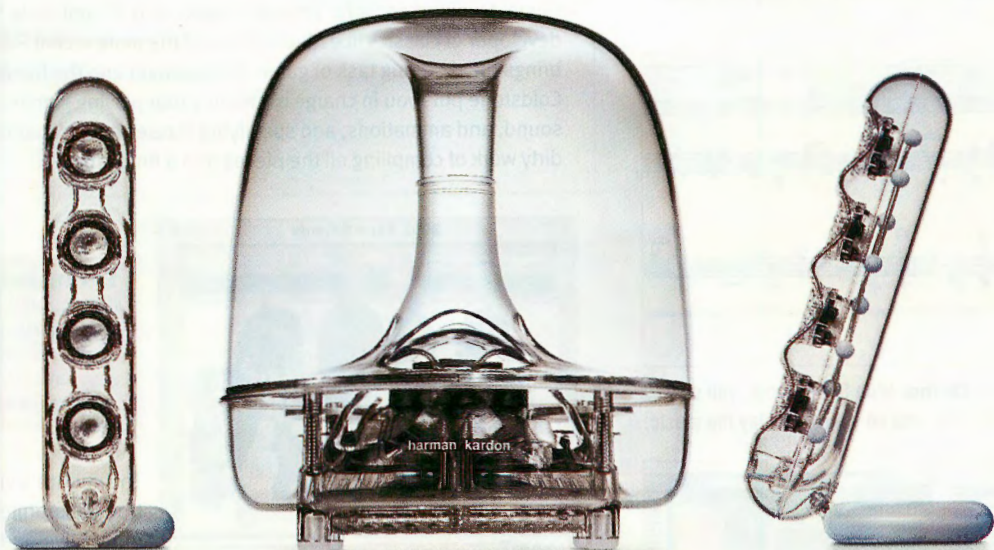
A. I'd like to see smaller Macs with dual

processors, SuperDrives, and USB 2.0 ports across the line.

Q. What will be the most important announcement at the next Mac Expo?

A. Now that Apple has broken the gigahertz barrier, I think Jobs will announce a revamped iPod and some other consumer electronic thingie.

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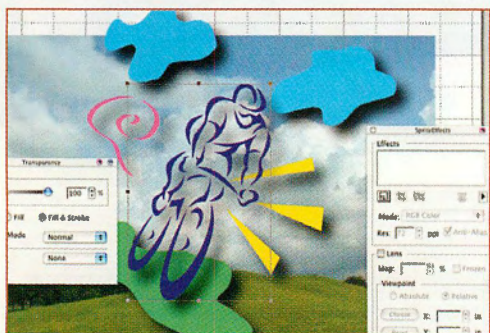
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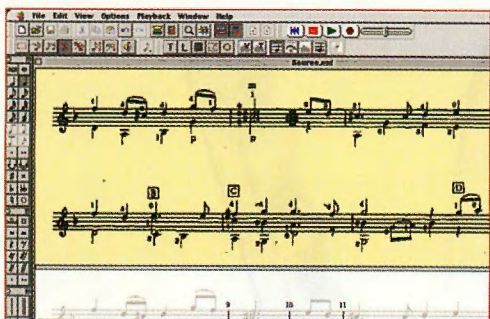
Gamers, artists, musicians, developers:
This Disc's for you.



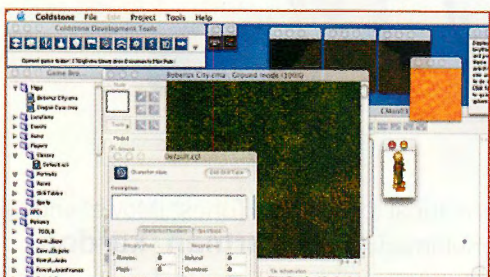
Myth III Demo: The swamps are a welcome place for all you die-hard Myth players.



Canvas 8 Demo: It's high time Photoshop had some real competition.



SmartScore 2.0 Demo: With SmartScore, you can put the piano in the attic and let your Mac play the music.



Coldstone Demo: Who knows? If you create the next killer game, it just might appear on a future Disc.



Myth III Demo

Mmm...Myth. The real-time strategy game that stole days from many gamers' lives is back, now in its third incarnation. Myth III is a prequel, taking place 1,000 years before the first game's time frame. As the mastermind of your army, you can slash, conjure, and satchel-bomb your way to victory. Myth III's spectacular 3D characters and environments make the first two titles look like 1990s coin-op games.

Canvas 8 Demo

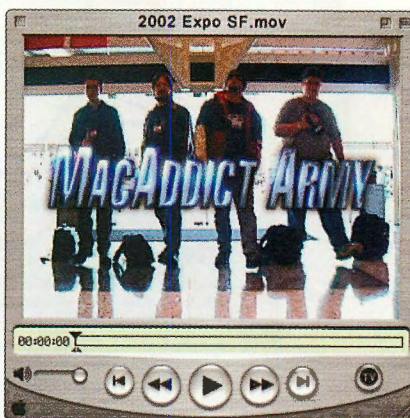
Maybe you're just getting into graphics work and find Photoshop a little too rich for your pocketbook. If that's the case, then Canvas 8 may be the answer. This image-editing app is not just a Photoshop clone. It sports some unique features, such as sprite-layer technology and drawing tools. Give the demo a try and experience it for yourself. Oh, and it runs on Mac OS X.

SmartScore 2.0 Demo

Wow—it's OCR (optical character recognition) for music! Imagine scanning a page of sheet music into your Mac and turning it into a MIDI file, ready for editing and arrangement. SmartScore will do that and more. It will even scan lyrics and turn them into editable text. For composers, arrangers, and electronic musicians, it doesn't get any easier (unless you want to pay several hundred dollars to have a scribe do it by hand). Save scans as MIDI and put them up on your Web page. Play back your scanned music in QuickTime Player. Imagine the possibilities!

Coldstone 1.0 Demo

Game development is for serious coders...or is it? Ambrosia Software, the developer of classics like Maelstrom and the more recent Pillars of Garendall, brings the daunting task of game development into the hands of us mere mortals. Coldstone puts you in charge of creating role-playing games—importing graphics, sound, and animations, and specifying classes and scenarios. Then it does the dirty work of compiling all the pieces into a final product.



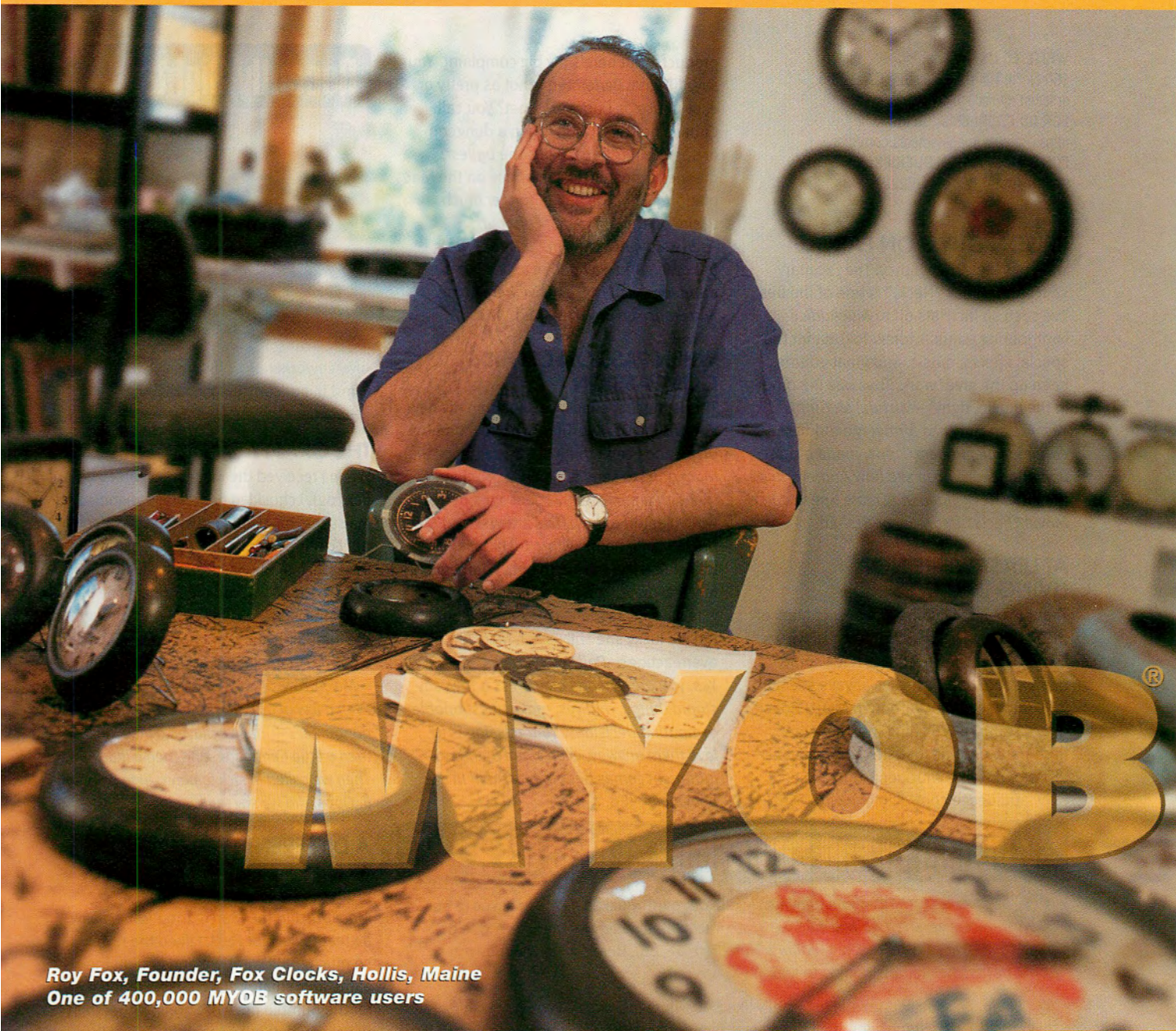
Mac geeks in their natural habitat: the San Francisco Mac Expo 2002.

Exclusives! Bert is back with his Mac tutorials. This one shows you how to enjoy your Mac even more! Nitrozac gives us another installment of her famous geek comics. Also included: the custom Max skin for iTunes Remote.

This month's video is the product of true Macophiles: the MacAddict Army. Give one guy a camcorder and another a microphone, throw in a bit of personality, and experience the San Francisco Mac Expo through the eyes of MacAddict fans. You'll be amused for sure.

If you don't receive the Disc with your copy of MacAddict, you might want to consider upgrading! Each monthly Disc contains cool demos, useful shareware and freeware, and the inimitable MacAddict staff video. To get 12 issues of MacAddict that include this value-packed Disc with your subscription (prorated if necessary) for just \$10 more, call 888-771-6222—the operator will take care of everything.

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PRISON GUY'S ON PAROLE

You guys are getting fancy. The February staff video, "Kicks Neck," is one of the best I've seen so far. Hats off to *MacAddict's* contributing editor Andrew Tokuda for the special effects, music, and great editing. Keep up the great work. That was Prison Guy in the movie, right?—*Michael McGinnis*
Yes, Prison Guy, aka former MacAddict editor in chief Robert Capps, made a cameo appearance. You can see how Andrew made the Kicks Neck video in "Create Spectacular Movie Effects" (Mar/02, p68).—Ed.

AT LEAST WE'RE NOT LIVING IN CAVES

Thanks for finally doing a review of Mark of the Unicorn's Digital Performer 3 (*Reviews*, Feb/02, p58); however, I do have some qualms. First off, you guys always seem a little Cubase happy. Although MOTU doesn't directly support VST plug-ins, there are third-party options for using real-time VST plug-ins like Wrapper (Audio Ease, www.audioease.com, \$29.95) with MOTU

products. But here's my big complaint. You say, "[Digital Performer] is not as pretty or easy to use as Cubase." What? You call Cubase pretty? Do you live in a dungeon or something? Cubase has the ugliest, dreariest, most PC-like interface on the Mac platform. I find Digital Performer much easier on the eyes.—*Jeff Engholm*
As they say, beauty is in the eye of the beholder. And we happen to like our dungeon—rent is expensive here in the San Francisco Bay Area.—Ed.

WHEN PASSION CLOUDS COMPASSION

This is the first email I've sent from my new PowerBook G4/550 Titanium with combo drive, and I can't think of a better place than *MacAddict* to send it. I have a problem. A friend of mine recently spent ages debating which laptop to buy. He's always used Mac, but he came home with a Toshiba. I no longer feel like talking to him. I don't even feel like drinking beer in his company. My wife says my response is irrational, but I tell her it's lucky she still uses a Mac. Am I overreacting?—*Phil Kay*
Yes, you are. Friends may dress badly, say stupid things, and yes, make questionable computing decisions. Your mission is to love them anyway, even when their bad judgment comes back to bite them in the beer stein.—Ed.

Switching to and Squawking at Mac OS X

Our cover feature "It's Time to Switch" (Feb/02, p20) wreaked as much havoc to our in-boxes as when we first said we loved Microsoft ("Renewing the Faith," Oct/01, p39), then later said we hated it (*Editor's Note*, Feb/02, p6). Here's what you thought about our article on transitioning to Mac OS X:

Your February issue was great! I especially liked "It's Time to Switch." I was just waiting for that article. I was curious about all the current features and how to set up everything so I can get online.—*Jake Umberger*

Since when did magazines start ordering their readers what to do? Well, your cover was partially right. It is time to switch: over to Windows and away from Apple and *MacAddict*.—*Kurt Ostfeld*

You needed one caveat on your article. It's time to switch to Mac OS X—if you've got the cash.—*David W. Hamilton*

Great article on migrating to Mac OS X. I was really pumped to see a section on networking, but how do I get my Epson 850N network printer to work with OS X?—*Tom Antonik*
Epson plans to release Mac OS X drivers for this printer by the time you read this.—Ed.

Recently Sighted



My coworker and I display this thrift-store find in our cubicle to ward off intruders.

—*Jaimie Muehlhausen*

THE CRAFTY GAME DEMO

When I received the *MacAddict* games issue (Jan/02), I chuckled heartily. We dignified Mac users have no need for such tomfoolery, but I decided to play the Starcraft Demo on the Disc. I grinned at the absurdity of the splash screen, wondering how anyone could enjoy this stuff, and then I played through the tutorial. Twenty-four hours later, I bought a copy of Starcraft at Staples. I feel so dirty.—*Max Arrow*

Even a few of us editors were dignified nongamers—until we played a little Sims, then a little Centipede, and then a little Alice. Then we called in sick to play a little Warcraft II. Oops, did we say that out loud?—Ed.

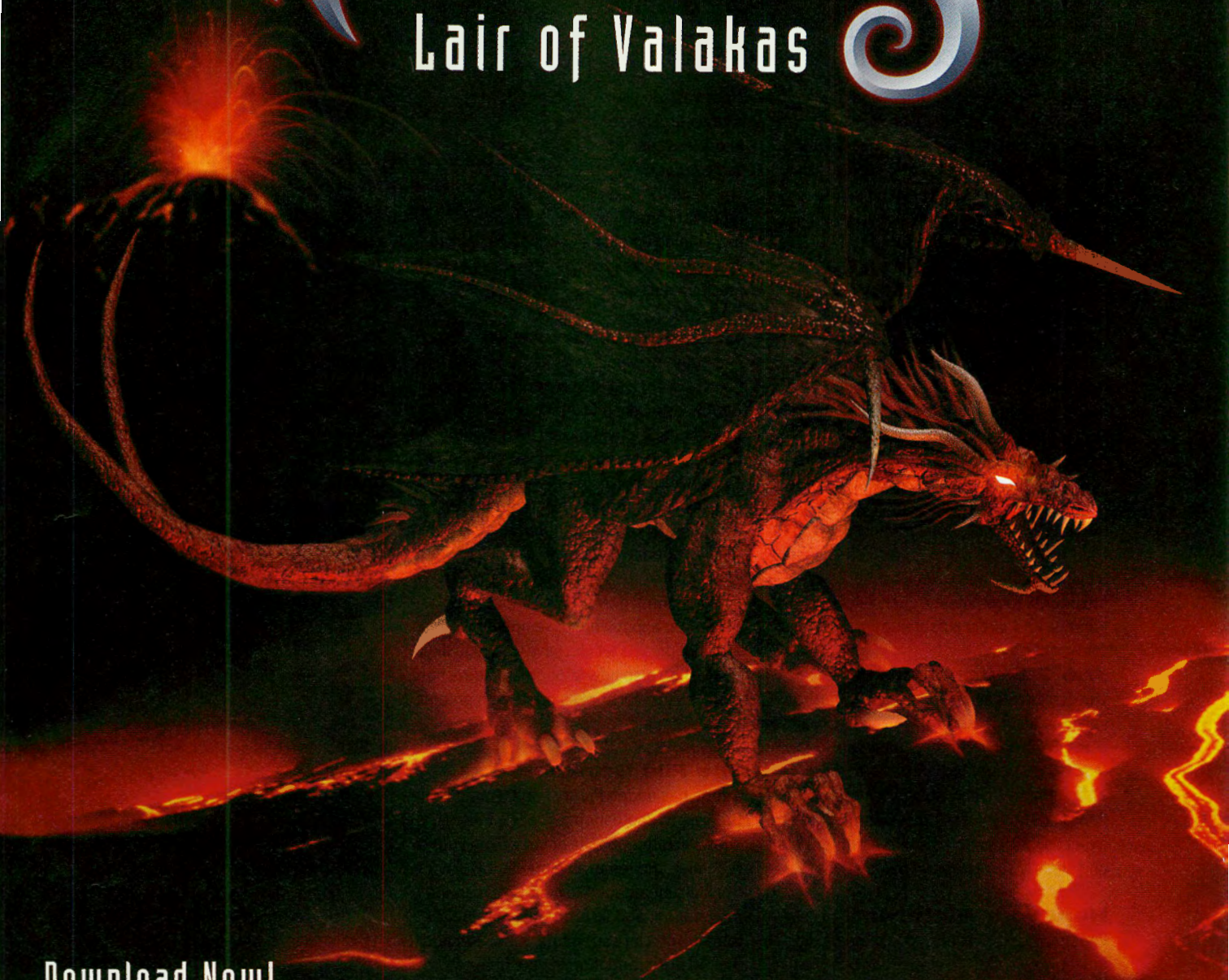
A DIFFERENT TYPE O' PRICING

While reading the wonderful reviews produced by you guys (and gals) at *MacAddict* in the March 2002 issue, I saw a great review for Fly II. I liked the review so much that I went out and bought the game immediately. Of course, I found it for the humble price of \$39.99 rather than the somewhat outrageous SRP price listed in the review. Apparently, I saved nearly \$860! I enjoyed reading the article (and pocketing the extra cabbage!). Thanks again.—*Jason Reinke*

We took the liberty of adding in the cost of the bomber jacket, vintage flight helmet, and overpriced sunglasses we had to buy after getting hooked on Fly II. Sadly, these accessories have not improved our ability to land. You're right, of course, the game does indeed retail for \$39.99—our mistake.—Ed.

Lineage

Lair of Valakas



Download Now!

www.lineage-us.com



NC SOFT™

For more information, subscription fees, downloading Lineage or acquiring a CD, go to <http://www.lineage-us.com>. Internet connection and online fees required. Mac OS 10.1. © 2002 NC Soft Corp

The Magnificent 7

Adobe Announces Photoshop 7 for Mac OS X

Photoshop 7 is here—and at last, it's compatible with Mac OS X and Mac OS 9. We got a sneak peek, and glimpsed some cool new features that will entice graphics professionals, fine artists, and photography hobbyists.

What Took So Long?

When graphics giants like Macromedia FreeHand and Adobe Illustrator and GoLive made the mad dash to Mac OS X, Photoshop lagged noticeably behind. Adobe senior product manager Karen Gauthier points to Photoshop's age (it's 11 years old now) and complexity as the reasons. First, Adobe engineers had to Carbonize an old imaging model. "The core of Photoshop is very old, and if you start messing with that, you start messing with what makes Photoshop great," she says. Second, Adobe had to wait for Apple to provide OS functionality, such as certain libraries and direct cursor support.

The 7 Experience

The disc includes both Classic and Carbon versions of Photoshop 7, which supports Mac OS 9.1 and later (dropping support for Mac OS 8.6) and Mac OS 10.1 and later. Although Adobe had not yet optimized the Carbon code by press time, Gauthier says to expect slightly higher system requirements and slightly slower speed in Mac OS X.

Heal Your Pictures

Perhaps the coolest new tool is the healing brush, which, like the clone tool, lets you sample an area and apply the sampled pixels to another area that needs retouching. Unlike the clone tool, the healing brush tool adjusts the sampled pixels to the color and lighting of the retouched area. The result is more natural and faster photo retouching,

since you can use a larger brush size and a less specific sampled area. The similarly used patch tool, great for cleaning up dust and scratches, lets you lasso an area to sample and use to patch up defects.

Brand-New Brushes

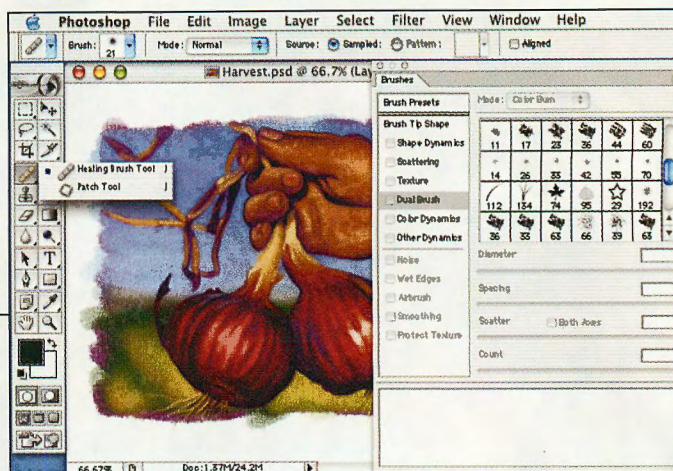
The brand-new painting engine is the biggest change to Photoshop, according to Gauthier. To take advantage of it, Adobe brought back a beefed-up stand-alone Brushes palette, absent from Photoshop 6. The new Brushes palette gives you size and spacing controls for sampled brushes, a new view for stroke thumbnails, and a preview window where you can see the effect of the brush you're creating. You have greater control over the tip shape, color dynamics, and texture of sampled brushes, and tool presets let you save what you like. Photoshop also now supports tilt, direction, and pressure for strokes made with graphic pens and tablets.

The File Browser

Adobe has added Photoshop Elements' File Browser to Photoshop 7. The File Browser shows you thumbnails of images on your hard disk and removable media, displaying the file's metadata (file type, size, camera information, and so forth) in a read-only format. You can sort, rotate, rank, and add limited file information to your images.

Better Productivity

Photoshop 7 also adds some productivity-enhancing features, such as workspace customization for handling the growing number of palettes and windows. Users can



Photoshop 7 goes fine art. Based on a photograph, this image was created entirely by Photoshop brush strokes.

customize a desktop with their preferred tools and tell Photoshop to remember that arrangement. Photoshop 7 also lets you customize and save tool settings, and it includes a spelling checker (finally!).

With even more new features—including a Pattern Maker in the Filter menu; Auto Color, which works like Auto Levels; and new Web tools (see below)—Photoshop 7 looks like a robust upgrade. Version 7 should be available in April 2002 (\$609 for the full product, \$149 for the upgrade).—NR

New Web Tools

Adobe added some small but sought-after features for Web designers in the Photoshop's Save For Web window.

Transparency Button It knocks out a color to create transparency in GIF images.

Color Remapping The color palette lets you remap (or globally substitute) individual colors.

Dither Transparencies For complex print graphics that don't translate well to the Web, Photoshop 7 lets you simulate partial transparencies.

ImageReady 7 Adobe jumped the number and added new features to this bundled Web-graphics app.

Rick Nielsen's
Cheap Tricks

12 MacAddict APR/02

We knew Rick Nielsen, guitarist for the seminal rock band Cheap Trick, was a Mac fan when he showed up onstage at a Cheap Trick and Aerosmith concert wearing a MacAddict T-shirt. However, we didn't know he was a shareware buff until we caught up with Nielsen backstage at the Compaq Center arena in San Jose, California, where he pulled out his PowerBook G4 Titanium and showed us his favorite apps.



Cheap Trick's Rick Nielsen has his own Think Different poster and more Macs than we can count.

Five Big Apps for Small Business

Run Your Company from the Comfort of Your Mac

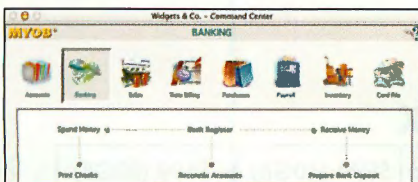
Promote your G4 to CFO and use these five apps to track accounts payable, manage the payroll, and file your taxes.—Keelin Devincenzi

AccountEdge 2

(MYOB, www.myob.com/us, \$249.99)

Requirements: Power Mac or faster, Mac OS 8.6 or later

AccountEdge lets you process payroll, track inventory, maintain company accounts, and create more than 160 financial and management reports. With electronic fund transfers, direct deposits, and online processing of merchant credit cards, AccountEdge moves your accounts payables and accounts receivables online. AccountEdge also imports and reconciles your online bank statements.



Use AccountEdge 2 to mind your own business.

MyBooks 5.1

(Appgen, www.appgen.com, \$99.99)

Requirements: Power Mac or faster, Mac OS X only

MyBooks starts with basic software for accounts receivable, accounts payable, billing, and purchase-order processing and expands with add additional modules (like payroll) as needed. The software supports multiple users and two modes: simple and total. Simple mode has an easy-to-follow interface designed to guide users without an accounting background through sales, purchasing, and inventory. Total mode has additional higher-level features so office controllers can reconcile balances, process payroll, and track job costs.

QuickBooks Pro 4.0

(Intuit, www.intuit.com, \$199.95)

Requirements: 680MHz Power Mac or faster; System 7—Mac OS 9.x

Although Intuit hasn't revamped QuickBooks for the Mac since 1999 (to fix a year-2000

glitch), the software is still popular with small-business owners. Users can manage accounts receivable and payable, create purchase orders, reconcile transactions, and enter inventory. Freelancers can use the software to estimate time and project costs. QuickBooks' reminder feature helps overworked home business owners pay their bills on time.

TaxCut Deluxe for Macintosh

(H&R Block, www.taxcut.com, \$24.95)

Requirements: Power Mac or faster, Mac OS 8.6 or later

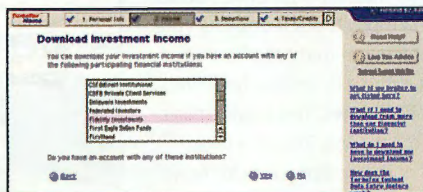
TaxCut Deluxe targets sole proprietors—small-business owners that attach small-business forms to their personal income tax returns. Users can file state and federal taxes electronically, although TaxCut Deluxe currently supports tax returns for only 36 states. The software's Audit Buster feature highlights potential audit problems, and the Click and Fix button automatically corrects software-identified errors that the user wants to change. TaxCut Deluxe will import data from Intuit's Quicken or Microsoft Money.

TurboTax Home and Business for Mac

(Intuit, www.turbotax.com, \$69.95)

Requirements: Power Mac or faster, System 7.6.1—Mac OS 9.x

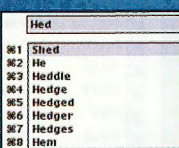
Like TaxCut Deluxe, Intuit's TurboTax targets sole proprietors. TurboTax tracks depreciation of holdings and maximizes tax credits for home offices while alerting users to which deductions may raise audit concerns. The program also estimates 2002's quarterly payments. If you already use Intuit's Quicken, TurboTax will automatically import the data it needs to prepare your 2001 tax returns.



TurboTax's no-frills (read: boring) interface lets you download electronic investment income figures directly into your 2001 return.

SpellTools

Newer Technology; <http://newer.tech.technojunkie.org>; free for Mac OS 8 and earlier, \$10 for Mac OS 9
SpellTools is a free spelling checker, suitable for text editors like BBEdit and Simple Text. SpellTools also reads aloud, inserts text strings with a rubber-stamp tool, and cleans up incoming email.



SpellTools adds a spelling checker to text editors.

GraphicConverter

Lemke Software,

www.graphicconverter.net, \$35

GraphicConverter opens and converts almost any graphic file format and comes with a healthy set of image-editing tools to boot. Check out *MacAddict's* "Filter Images with GraphicConverter" (Sep/O1, p70).

newsNOOK

The G4 Goes Double Giddy

Apple (www.apple.com) has unveiled a new dual-1GHz G4 tower for \$2,999 and a single 933MHz tower for \$2,299. Each includes an L3 cache with 2MB-per-processor of DDR (double-data-rate) SDRAM running at 500MHz for the dualie and 466MHz for the 933MHz model, a SuperDrive, and a 64MB nVidia GeForce4 graphics card capable of running simultaneous ADC and VGA displays. To complete the line-up, the company also introduced an 800MHz Power Mac G4 (\$1,599) that includes a CD-RW drive and an ATI Radeon 7500 with 32MB DDR SDRAM and dual ADC/VGA display capability—but no L3 cache. All models are available now.

iMac Off to a Fast Start

By the end of January 2002, Apple had 150,000 pre-orders for the new iMac. That number is greater than all the pre-orders for the original iMac in 1998, says Philip Schiller, Apple's senior vice president of worldwide product marketing.

Toshiba's Got Drive

Toshiba (www.toshiba.co.jp) is releasing larger-capacity versions of its tiny 1.8-inch, ATA-5 hard drive. An 8mm-high, 20GB drive and a 5mm-high, 10GB drive will be available by the time you read this. We're 99 percent sure Apple puts Toshiba's 5mm-high, 5GB disc in the iPod, so we're hoping to carry around 10GB worth of tunes soon.

Profit

Apple announced a \$38 million net profit for the first fiscal quarter of 2002 (ending December 29, 2001). For those who care to remember, Apple posted an ugly \$195 million net loss for the first fiscal quarter of 2001. Revenues for the first fiscal quarter of 2002 were \$1.38 billion, and gross margins were 30.7 percent.

A Google of iMacs

Apple's (www.apple.com) succeeded again in creating a buzz. The iMac ranked sixth on Google's (www.google.com) Top 10 Gaining Queries list of search terms gaining in popularity for the week ending January 14, 2002. The term most often searched that week was *Survivor*. Guess what ranked fifth on the list of Top 10 Declining Queries for the week? *iWalk*.



Find GraphicConverter 4.2 on the Disc.



GraphicConverter rocks, and it's only \$35.

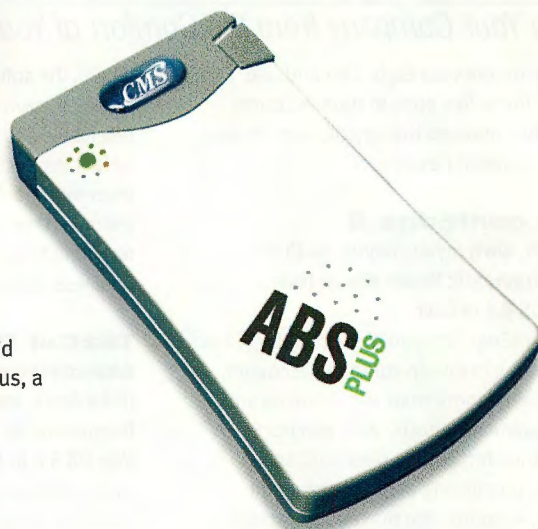
droolWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

ABS Plus

CMS Peripherals www.cmsproducts.com \$279 and up

Like exercise, backing up your hard drive is a good-for-you practice you'd rather avoid. CMS Peripherals makes file backup more fun with ABS Plus, a FireWire and USB 2.0-enabled hard drive (in 10GB to 60GB sizes) that automatically backs up your whole system or just preselected files.—NR



The portable silver ABS Plus takes the *ack* out of backup.

PHOTOGRAPH COURTESY OF CMS PERIPHERALS



Neo Car Jukebox

SSI America www.ssiamerica.com \$599 (40GB) or \$699 (80GB)

Modern Mac addicts won't go anywhere without at least 1,000 tunes at their fingertips, so SSI America created the Neo Car Jukebox in 40GB and 80GB sizes. The Jukebox installs in the trunk with a wired remote for the dash. To add music, you pull the jukebox out of the car, hook it up via USB to your Mac, and drag MP3 files onto its hard drive.—NR

This jukebox slides out of your car and into your Mac.

PHOTOGRAPH COURTESY OF SSI AMERICA

Shareware Pick of the Month

MacReporter 1.03

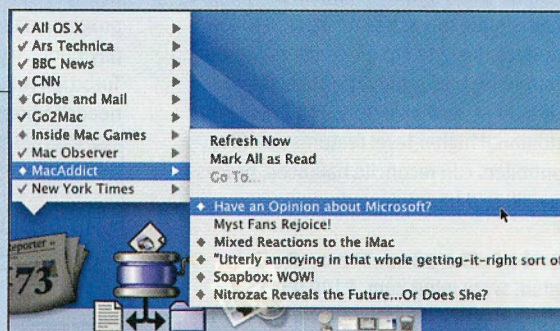
PRICE: \$12

URL: www.inferiis.com

Your Yahoo home page is now obsolete. Inferiis's MacReporter brings up-to-the-minute news directly to your Mac OS X desktop without launching your Web browser. MacReporter is a *dockling*—a miniapplication that runs from your Mac OS X Dock. When you launch the program, you choose to receive headlines from a massive list of news Web sites like CNN and BBC News. The news arrives right to your Dock, where you highlight a headline to have MacReporter take you directly to the Web page with the full story. The dockling can check for news from once every minute to once every five hours. It can alert you when it finds something new, and it displays the number of unread headlines in the Dock. For news junkies, MacReporter is the way to go.—Andrew Tokuda



Find Mac Reporter 1.03 on the Disc.



Pick the news sites you want to scan, and MacReporter will be your gopher.

Rick Nielsen's Cheap Tricks

Natural Order

Stuart Cheshire, discontinued

Have you noticed that your Mac can't list files numbered 1 through 10 in the right order? Natural Order corrects that little flaw. These days, the best place to find this 1996 release is right here on our Disc.



Find Natural Order 1.4 on the Disc.

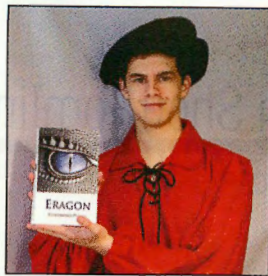
file 1	Today	24 K	file 7	Today	24 K
file 10	Today	24 K	file 8	Today	24 K
file 12	Today	24 K	file 9	Today	24 K
file 13	Today	24 K	file 10	Today	24 K
file 2	Today	24 K	file 12	Today	24 K
file 20	Today	24 K	file 13	Today	24 K
file 3	Today	24 K	file 20	Today	24 K

Our Mac can't list these files correctly on its own (left). With Natural Order, it can (right).

Publish Your First Novel

Your Mac Makes It Possible

Christopher Paolini wrote, edited, designed, and published his first book, *Eragon*, all by the time he was 18 years old. Paolini takes us through the process of creating his adventure-style fantasy novel. Self-publishing your first novel takes a lot of hard work, but success is more attainable than you might think.—NR



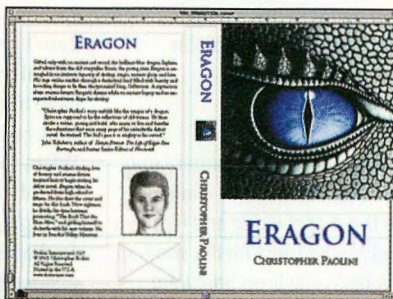
Here's Paolini, dressed as a storyteller. *Eragon* is sold at retail booksellers and www.factsources.com.

Creating the Book

Paolini wrote his manuscript in one Microsoft Word document, which totaled 316 single-spaced pages. He then designed and typeset the pages of his book in Adobe PageMaker (www.adobe.com, \$499), using master pages (page templates) to place running heads and page numbers on each page. To maintain a clean design, he used only three typeface families: Adobe Garamond for the body text, Trajan for cover and chapter titles, and Symbol for the order form in the back of the book.

Creating the Covers

Paolini drew the art for the book covers in pencil and then scanned the images into Photoshop, where his sister Angela used the Layer and Opacity controls to add rich textures and color. Paolini saved the images as TIFF files and imported them into PageMaker for the layout. Lightning Source, the company that printed Paolini's book (see below), has downloadable QuarkXPress templates upon which you can base your layout.



Paolini tweaked illustrations in Photoshop, then designed the book cover in PageMaker.

Prepping for Print

Paolini saved the PageMaker document of the back and front covers as a PostScript (PS) file. He opened the PostScript file in Photoshop, ensured that it had the right size and color specifications, and saved the file as a TIFF image. For the inside pages, Paolini saved the PageMaker document as a PostScript file, and then distilled it in Acrobat 4.05 to create a PDF file. Paolini burned the cover TIFF and the book PDF to CD, and then sent the disc to Lightning Source, which has very specific requirements for receiving files to print. For more information, check out its Web site at www.lightningsource.com.

Selling Your Words

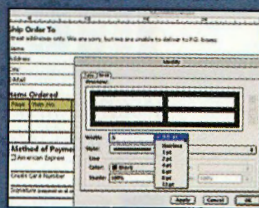
If you want to sell your book, you can ask Lightning Source to list it in a database of printed books. This list goes to retailers like Barnes and Noble. When someone orders your book, Lightning Source prints it and sends it to the bookseller, which then sells the book to the customer. This system, called *print on demand*, can be mildly profitable. Each copy of Paolini's book costs \$7.00 to print. Amazon.com pays \$13.77 for each copy of the book and charges \$22.95 to sell it.

newSTUFF

QuarkXpress 5.0

Quark, www.quark.com, \$995

Whoa, Nellie. It's finally here. QuarkXpress 5.0 is available for the Classic Mac OS (See "Quark Pros Tell All" on p36 for expert tips on using Quark), and a Carbon version is in the works. The new version of the popular desktop publishing software comes with new table creation tools, a new layers feature, and a better Print user interface that includes enhanced PDF support, contextual menus, and better color management.



QuarkXpress 5.0's new table creation tool is music to designers' ears.

MultiSync LCD

Mitsubishi, www.necmitsubishi.com, \$799 (17-inch) or \$899 (18-inch)

Mitsubishi has introduced two affordable LCD displays: the 17-inch LCD1720M and the 18-inch MultiSync LCD1850E. The 17-inch display measures 3.4 inches deep and weighs only 16.1 pounds. The 18-inch display's space-saving design measures 3.1 inches deep and weighs 18.7 pounds. Resolution on both is 1280 by 1024 at 60Hz.

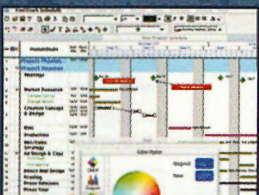


Mitsubishi makes LCDs more affordable.

FastTrack Schedule 8

AEC Software, www.aecsoft.com, \$299

AEC Software will offer a new Mac OS X-only version of its project management software in February or March 2002. The carbon app will offer a redesigned interface with better row formatting, text formatting, and outline views. It will handle more graphic file formats through built-in QuickTime support and comes with more bar styles and templates.



This project-management software is OS X-only.

Stitcher 3.1 for Mac OS X

Realviz, www.realviz.com, \$495

Realviz carbonized its software for building high-resolution panoramic images that rotate up to 360 by 180 degrees. The software can create planar, cylindrical, cubical, or spherical panoramas, and has built-in color-correction features.



Stitcher 3.1 makes hi-res panoramas in Mac OS X.

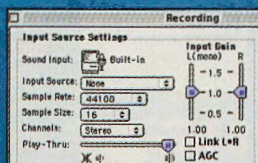
Coaster

VisualClick Software, www.visualclick.de, free

This free audio-recording software creates editable AIFF sound files, set sample rates and sizes, and input gain. It splits recordings into multiple files if the recording level drops below a predefined level, and you can split files manually.



Find Coaster 1.1.3 on the Disc.



Coaster records sound files to your Mac.

Kineticon

Kinetic Creations, www.kineticcreations.com, \$19.95

It makes sense that someone who plays a customized five-neck guitar wouldn't stand for standard desktop icons. Nielsen uses Kineticon to animate his files, folders, and hard disk icons.



Find Kineticon 2.0.3 on the Disc.



Icons can hypnotize.

INtheSTUDIO with Shon Tomlin

Mixing Film and Video Creates Honest Ads for Grammy-Winning Band

To promote Radiohead's new album, *I Might Be Wrong: Live Recordings*, Capitol Records hired Shon Tomlin to direct and produce six television commercials that would air on MTV, VH1, Cartoon Network, and network television. Tomlin, who previously directed and produced the Beastie Boys minidocumentary for Warner Bros. Online, used his PowerPC 9500 to intertwine old-school film footage with digital video, creating documentary-style advertisements that ring true to the rock band's noncommercial message.—Keelin Devincenzi

Keeping It Real

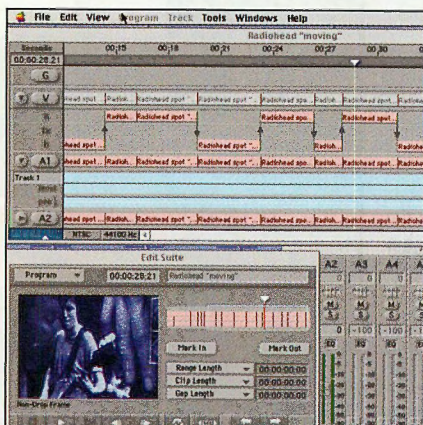
The commercials feature six Radiohead fans in their everyday clothes and normal environments, talking candidly to the camera about the band they love. To create a raw, home-movie feel, Tomlin shot the interviews with an old Canon 1014 XLS camera and popped in a Super 8 film cartridge, which is an 8mm film format. He then used a miniDV camera, a Sony DCR VX 1000, to shoot digital video from a second backup angle. He also recorded audio with the Sony camera, since his budget didn't allow for renting sound equipment and hiring a sound operator, and the Canon Super 8 camera couldn't record audio. Tomlin also recorded live concert footage. To maintain a gritty quality, he didn't shoot the band directly, as the resulting

video would have been too sharp. Instead, he pointed his Sony DV camera at two large video walls, set up at the concerts to project the live performance. "It maintained the distressed feel," Tomlin said. "It's very pixelated."

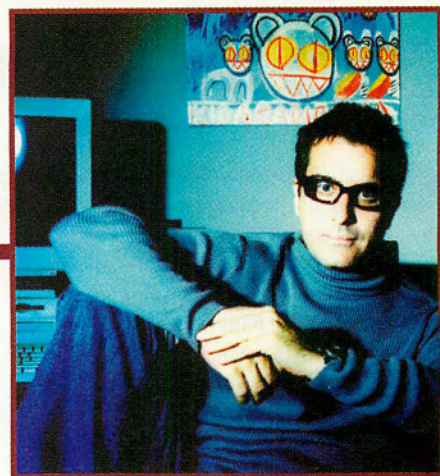
Analog, Meet Digital

Having shot Super 8 film on one camera and miniDV video on another, Tomlin's challenge was to combine the digital-video and film formats. He used Media 100's Media 100 i/xs version 4.5, a professional-level hardware and software video-editing system. Tomlin's Super 8 film isn't the only old-timer in his arsenal. He edits video on a 132MHz PowerPC 9500 running Mac OS 8.6. Since buying the system in 1995, he has updated its insides with 1GB of hard drive space and 176MB of RAM. "It's very cool that it has not become obsolete," Tomlin says.

After developing the Super 8 film and telecining (transferring) it to BetaSP video, Tomlin digitized it with the Media 100 software and hardware so he could edit the video on his Mac. He minimally distressed the DV video by playing with the luminance (brightness) and chrominance (color) so it would blend well, but not seamlessly, with the Super 8 footage. Tomlin emphasizes, "I didn't try and make it so you couldn't tell [the two formats apart.]" To move between the Super 8 and miniDV video segments, he added transitions such as Media 100's Dissolve-FastFX.



Tomlin uses Media 100 i/xs version 4.5 to capture and edit film and video on his PowerPC 9500. Media 100's version 8 package is OS X compatible.



PHOTOGRAPH COURTESY OF SHON TOMLIN

Tomlin combined film and digital video to create cool, lo-fi commercials for the Grammy-winning rock band Radiohead.

An Uncommercial Commercial

Tomlin's straightforward shooting and creative mix of film and video reflects Radiohead's no-hype image. He says, "We didn't have the budget to rent Beta cameras or real sound equipment, and we didn't have a lot of time to shoot and edit, but it worked because that would have been too TVish, too staged." You can watch the Radiohead commercials in the Fans section at <http://hollywoodandvine.com/radiohead/videooplayer>.

Video for Cheap

Tomlin gave us some tips for working on a limited budget.

Keep It Simple A good story with a strong message does not need any special effects. So write and plot it well, and use straightforward shooting.

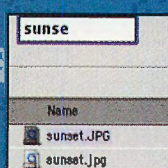
Pick Your Music First Music sets the tone for video editing. With fast music, you'll use quicker scene cuts with shorter shots. Slower music is more dramatic and suggests longer shots and more dissolves over scene cuts.

Pay Attention to Sound Many people neglect to get the sound right when they're shooting video. Use mics and spend time cleaning up sound files in postproduction.

Rick Nielsen's
Cheap Tricks

File Freak

John Scalo,
<http://homepage.mac.com/scalo/filefreak.html>, free
To navigate all his files and folders, Nielsen uses File.Freak. When he starts typing the file name he's looking for, the software finds the desired file.



File.Freak found our sunset snapshot.

TypeltForMe

Riccardo Ettore, www.r-ettore.dircon.co.uk, \$27
Time is money, and typing takes a lot of time, so Nielsen uses the TypeltForMe. He just types in a predefined abbreviation, and his Mac spits out the whole word.

Narasu Rebbapragada
Is a
Supercalifragilisticexpialidocious
MacAddict

We typed "nr is a su ma" to get this sentence.

DESIGN GENIUS

Juggles 6 projects simultaneously
Lives for deadlines
Knows all the graphics packages
Named kids Mac and Quark
Hasn't owned a tie since 1998

DIRECTOR OF COMMUNICATIONS

Prints color and B/W documents
Copies all documents or bound reports
Faxes are received on plain paper
Scans in color at the touch of a button
Makes you look good

MFC-5100c
COLOR FLATBED MFC
About \$299

Our Multi-Function Center® Models Do Everything. Just Like You.

No matter where or how you work, our all in one MFC's are designed to work for people like you. And with over 10 Mac or PC compatible models to choose from, finding the one with the performance and price you're looking for is easy. Some even have the ability to print from your digital camera media card! If you need a multifunction solution that works almost as hard as you do, you don't need five separate machines, all you need is the right one.

A VARIETY OF MODELS AVAILABLE AT: Office Depot, OfficeMax, Staples, J&R ComputerWorld, Global Computer Supplies, MicroCenter, Fry's, PC Connection, MicroWarehouse, CDW, Insight, PC Mall, Quill, Viking, Dell, Amazon.com and Gateway.com



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scrapbook

Learn what's on the inside without voiding your warranty.

The Video-Connection Question

by Narasu Rebbapragada

Chances are you have an eclectic assortment of video equipment and display devices. Here's our quick guide to finding the right port and the right cable for you.

Composite Video

Composite video gets video from your older devices—such as VCRs and 8mm, Hi8, and VHS camcorders—to a television. All the colors (red, blue, and green), the brightness, and sometimes the audio are mixed into one signal and transmitted via one wire. Composite video offers the lowest-quality signal of all the video-connection options mentioned here.



S-Video

S-Video technology separates video into two signals, one for color (chrominance) and the other for brightness (luminance), and gives you sharper image quality than composite video can (see above). S-Video is also called Y/C video. The Y stands for luminance and the C stands for chrominance. If your television doesn't have an S-Video port, you'll need to buy a stereo-audio video cable, which connects your camera port to your television's RCA plugs.



Apple Display Connector (ADC)

Apple scrapped the 15-pin VGA port in favor of the digital ADC connector, which transmits video, power, and USB in one cable. If your Mac isn't ADC friendly (that's everything pre-G4), you'll need an adapter like Gefen's VGA-to-ADC connector (www.gefen.com, \$399), which connects HD-15 VGA ports to Apple's LCD display family.



Digital Video Interface (DVI)

A few of you probably have DVI-connected Macs and Apple monitors. To connect an ADC Apple display to a Mac with a DVI video port, buy a DVI-to-ADC connector like Dr. Bott's DVIator (www.drbott.com, \$149.95).



Video Graphics Array (VGA)

Most Macs have a 15-pin VGA connector for connecting to monitors and projectors. There are two kinds of VGA ports, DB-15 and HD-15. The difference is the configuration of the rows of pins. If you have a DB-15 VGA port (found on beige G3 and older machines), you'll need a DB-15-to-HD-15 adapter like Griffin Technology's Mac PnP Adapter (www.griffintech.com, \$20) to connect to newer monitors.



FireWire

FireWire is Apple's name for IEEE-1394 connectivity. FireWire is how you'll connect most miniDV digital camcorders to your Mac. To digitize and import analog video from an old camcorder, use a DV converter like PowerR's Director's Cut (www.powerr.com, \$349).



Component Video

Component video transmits high-quality video by subdividing the signal into brightness and color components. Component video cables use RCA connectors with DVD players and home-entertainment systems and use BNC connectors with professional video setups like the Sony Betacam deck (above) and Media 100 junction box (left). Component video is sometimes referred to as Y/B-Y/R-Y.



Connect

TANGO™ FireWire®/USB

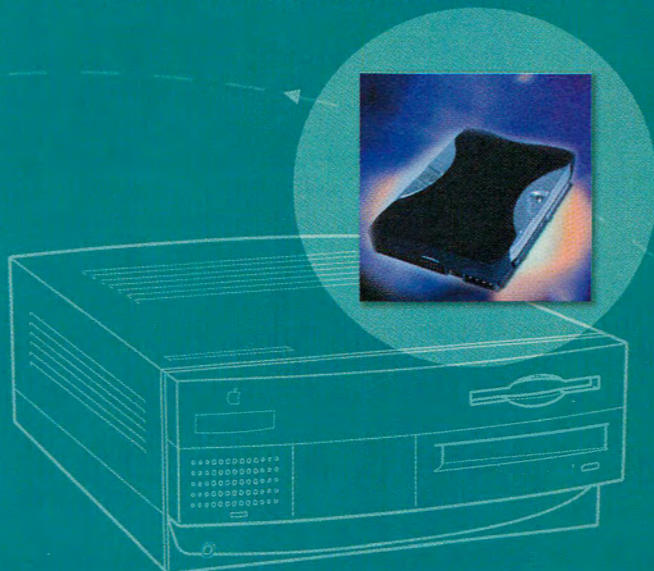
- Macintosh® combo card installs in minutes
- Compatible with most PCI Macintosh computers
- Supports all industry-standard FireWire & USB peripherals



Adapt

TEMPO™ ATA100

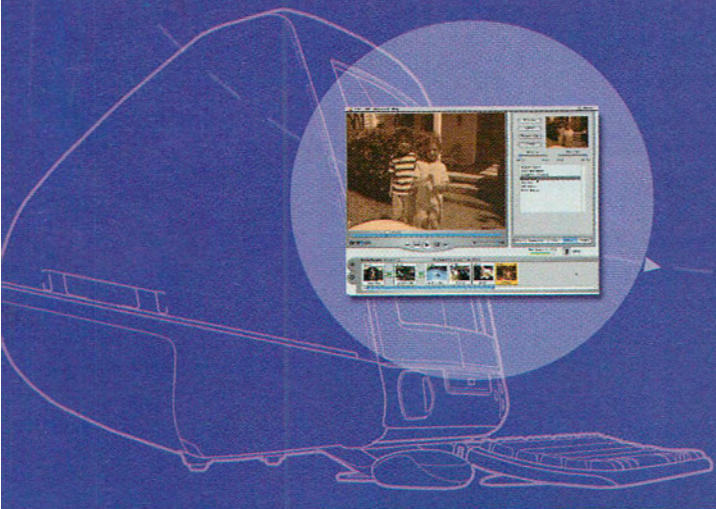
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Unleash Your Mac's Hidden Powers

See the word hacker and you probably think of some unshaven dude in a dimly lit room doing something horribly illegal. Right? While that may be one definition of hacker, another definition of the word describes you—the Mac addict who is willing to tweak your Mac in slightly unorthodox ways to unleash power, speed, and customization options you normally couldn't even touch.

The last time we ran an article about hacking was April 2000 (you'll find it on the Disc), but a lot has changed since then—namely, the release of Mac OS X and its wonderful Unix-based (aka hacker-friendly) underpinnings. Mac OS 9 offered much in the way of small customization tweaks, but little in the way of true power hacks. Mac OS X changes everything. From giving your Mac a performance boost to changing your Trash icon to adding convenient ease-of-use options, hacking can now be much more than a geeky pastime—it can be useful, too. And for those of you who have never hacked your OS, or are intimidated by the concept of digging around in places Apple doesn't want you to go, don't worry. Hacking doesn't have to be difficult or even dangerous. In fact, we've included a number of beginner- and intermediate-level hacks for both Mac OS 9 and Mac OS X that any semiproficient Mac user should be able to perform (contrary to belief, hacking is not brain surgery). And we haven't forgotten you hard-core hackers, either—check out the “Advanced Hacks” section.

One final, comforting note: We left each of these hacks on our test machines, and they're running beautifully. Surprised? You shouldn't be. You didn't really think we'd show you how to do something we weren't willing to perform on our own precious Macs, did you?

10 sneaky hacks to speed up, spice up, and soup up your Mac OS... and they're easier than you think!

by Dave Hamilton

photograph by Mark Madeo



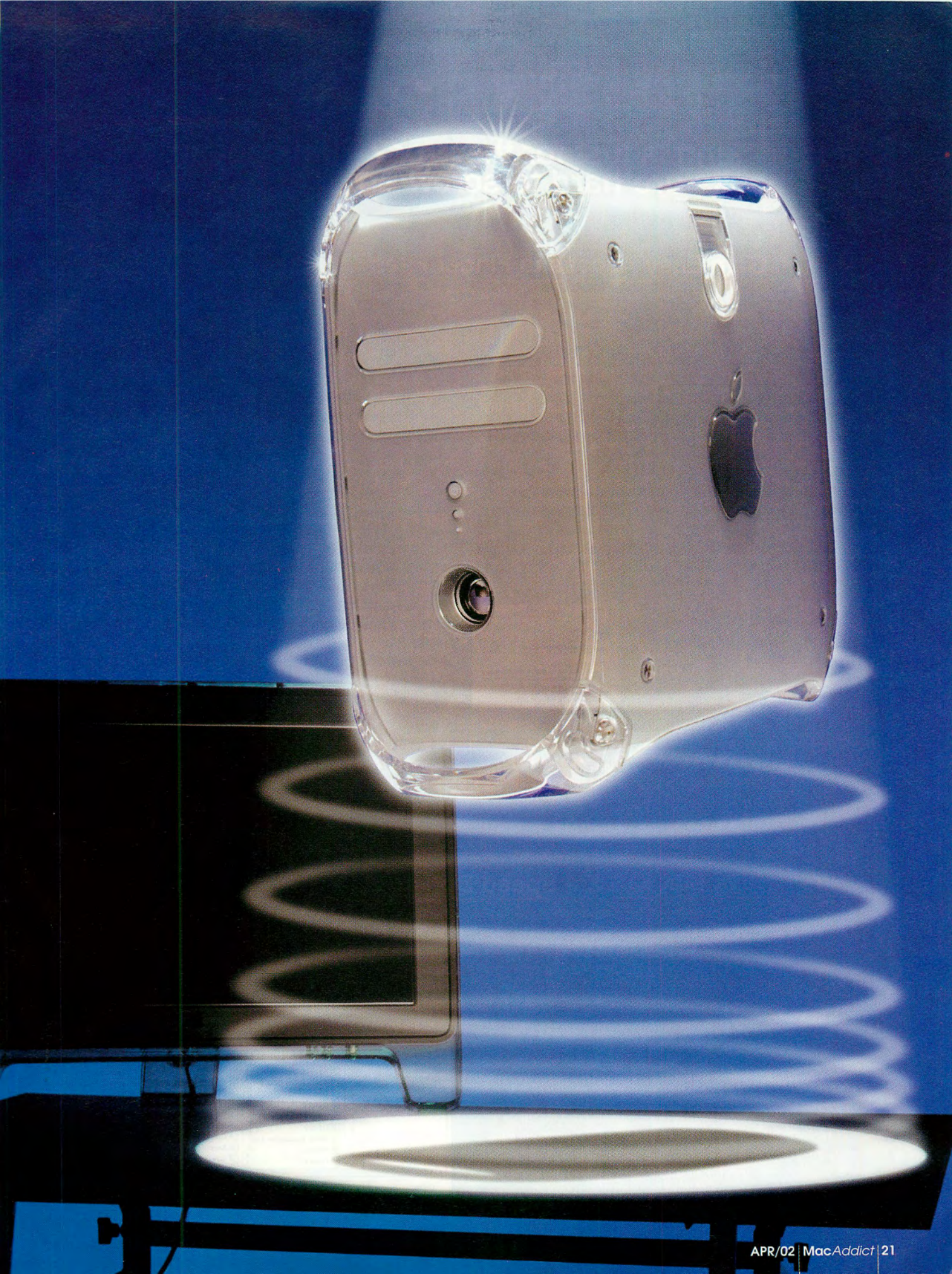
Find Iconographer X, a PDF of our April 2000 “Hack Your Mac 2000” article, and Mac OS X icons compliments of www.mmicons.com on the Disc.



Denotes a Mac OS X hack



Denotes a Mac OS 9 hack



Starter Hacks

Think hacking is just for the pros? Think again. These hacks are hard to screw up.

X

GEEK SPEAK: Run the Finder as root

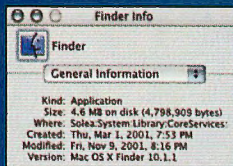
ENGLISH: Gain Easy Access to Finder Files

Have a file or document that refuses to let you delete or move it? More than likely, the reason is that the process requires authentication, yet Mac OS X doesn't give you the ability to authenticate yourself in the Finder. The fix? Run the Finder in root mode.

Say what? In Mac OS X (as in all Unix-based operating systems), one superuser is always more powerful than the rest. This user is named *root* and is often the sole owner of many system-level files that determine key settings for the entire computer (for example, root owns the files that tell your Mac how to start up, and what services to enable each time it does). The ability to run your Finder as root allows you to copy, move, and delete root-owned files, like those that control your system icons or contain your window settings. Now you *could* take a trip to the Terminal's command line to log in as root (see "Terminal Trouble," p26), but then you lose the benefit of operating within a GUI. By running your Finder as root, you can move all those previously untouchable files from the comfort of the familiar Mac OS interface.

How to Do It

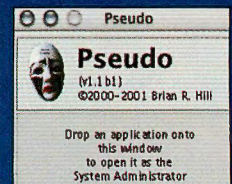
STEP 1: Grab a copy of the shareware Pseudo (\$15, http://personalpages.tds.net/~brian_hill/pseudo.html) and launch it. Pseudo, like its command-line counterpart *sudo* (get it?), allows you to run just about any program as root—a very handy utility, as you'll soon see. Open up a Finder window. From your hard drive, navigate through the following folders: System > Library > Core Services. In the Core Services



Make sure you choose the Finder of the kind Application, not Classic Application—otherwise this hack won't work.

folder you will find two copies of the Finder. Locate the one that is of type Application (not type Classic Application). You can find this information by highlighting the file and choosing Show Info from the File menu.

STEP 2: Drag that copy of the Finder onto the Pseudo window. Pseudo will likely ask you to enter your password. This is so the system knows it's kosher to run your program as root. Note: You need Administrator access to use Pseudo.



Pseudo allows you to run programs as root right from the GUI in Mac OS X.

STEP 3: Once you've authenticated yourself, the Finder icon will bounce in the Dock, the desktop will change to the default background, and a new window will open after the Finder has relaunched. That new window (and any windows you open subsequently) will have full root privileges associated with them. This is very handy when you get one of those mysterious files in Mac OS X that refuses to let you delete it (strangely enough, we've seen this happen with Microsoft Word documents even). By acting as the root user, you can go in and delete these pesky files. Just make sure you delete items you know are safe to delete and to empty the Trash before quitting the root-enabled Finder, or else you'll be stuck with a file permanently in the root Trash.

When you're finished with root, hold down Command-Option-Escape and then choose to force-quit the Finder. This will quit the root-enabled Finder, close all associated windows, and restore your desktop to its normal background.

X

GEEK SPEAK: Enable Window Buffer Compression

ENGLISH: Give Mac OS X a Speed Boost

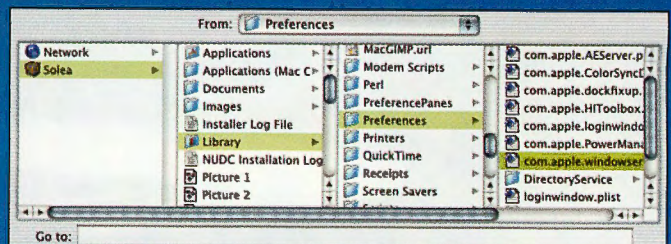
Mac OS X saves the contents of each window in a portion of memory called a *window buffer*. The OS uses this buffer when it needs to update windows or perform cool Aqua transparency effects. However, saving the entire contents of each window in RAM takes up gobs and gobs of memory. Depending on how many windows you have open and how much RAM your system has, this process can slow you down. Thank goodness Apple included a way of compressing the data in this buffer, which can help speed up your Mac by freeing up RAM. Inexplicably, Apple chose not to *enable* this feature. But that's OK—you can hack your Mac to do it!

How to Do It

STEP 1: First you must make changes to a Mac OS X preference file called *com.apple.windowserver.plist*, which only root users can edit. This file is in the Preferences folder within the Library folder at the root level of your hard drive (not the Library folder in your home directory). Before you do anything, duplicate this file (so you have a backup) by

holding down Option and dragging it to the desktop. Then, using your new friend Pseudo (see "Gain Easy Access to Finder Files," above), launch a copy of TextEdit as root to edit this file. To do so, go to your Applications folder, and drag TextEdit on top of your Pseudo icon.

STEP 2: Once TextEdit opens, choose Open from the File menu, and navigate to the original *com.apple.windowserver.plist* file.



Navigate to the systemwide Preferences folder to find the right file.

GEEK SPEAK: Use ResEdit to Hack IE's PICT Resources ENGLISH: Customize Internet Explorer's Startup

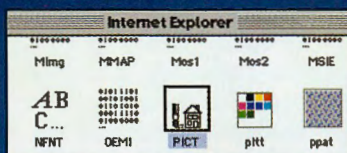
Sure, you can change your Mac's startup screen, but it's even cooler to change Internet Explorer's startup logo and replace it with something a little more eye pleasing.

How to Do It

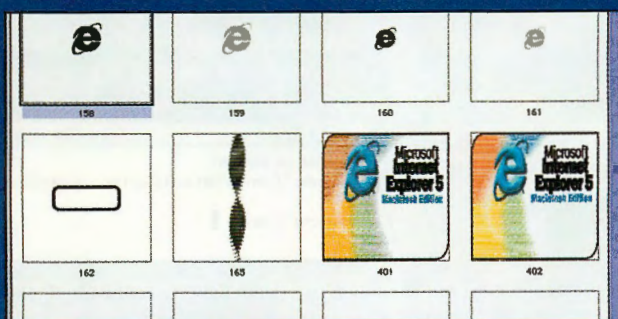
STEP 1: Make a copy of your Internet Explorer application. Just in case you mess up, you can go back to the unmodified copy of your app. Find the picture you want to use in the startup screen. Using a graphics app like Photoshop or GraphicConverter, size the picture to be 404 pixels wide by 245 pixels high, and copy it to the system's Clipboard.

STEP 2: Open up a copy of ResEdit (free, http://download.info.apple.com/Apple_Support_Area/Apple_Software_Updates/English-North_American/Macintosh/Utilities). From there, open up your original Internet Explorer app. Double-click the PICT resource, and you'll see two copies of your Explorer startup screen in there, with IDs 401 and 402.

Double-clicking the PICT resource reveals all the pictures stored within Explorer. Just replace 401 and 402 with your own image.



Opening up Internet Explorer in ResEdit results in a window containing all of Explorer's resources. You want the PICT resource.



STEP 3: Open up ID 401 by double-clicking its icon, and then choose Paste from the Edit menu. Close that window and repeat for ID 402. If you experience problems pasting in a picture, try increasing ResEdit's memory allocation. Quit ResEdit, allowing it to save the file. You're done! Now Internet Explorer will have a personal touch every time you start it up.



Make Internet Explorer more personal by pasting in your own precious pictures.

STEP 3: You see a file that looks like gibberish (it's just XML, but unless you know how to read that, it might as well be Swahili). Find the first <dict> tag, put the cursor underneath, press Return and type:

```
<key>BackingCompression</key>
<dict>
  <key>compressionScanTime</key>
  <real>5.000000000000000e+00</real>
  <key>minCompressableSize</key>
  <integer>8193</integer>
  <key>minCompressionRatio</key>
  <real>1.100000023841858e+00</real>
</dict>
```



Insert this text into your com.apple.windowserver.plist file to enable Window Buffer Compression.

STEP 4: Save this file. Go to the Apple menu, choose Log Out, log back in again, and you'll be running with Window Buffer Compression enabled! If you're lucky, your system will feel snappier (it even sped up our G3 system). This hack should make a difference to those of you who litter your desktops with open windows (you know who you are).

Understanding the OS

To truly appreciate the art of hacking, you should first understand how the operating system works.

Mac OS 9 splits most files, including documents and applications, into two distinct parts—the data fork, which houses raw data (like word processing text or the bits necessary to reconstruct a JPEG image), and the resource fork, the portion of the file that stores the info needed to make an app work properly. Resources typically hold icons, menus, error messages, and the like. In OS 9, you typically hack the resource fork of individual files using programs like ResEdit, which allows you to modify the individual resources to your liking.

With **Mac OS X**, things are a bit different. Unix is at the core of everything, and it stores all settings in text files. But that's of no concern to most users, thanks to Apple's use of *wizards*—menus, checkboxes, and other graphical interface elements that allow you to easily edit the settings in these text files. Many more options are available than you'll find in Apple's graphical wizards—for instance, window minimizing effects beyond Scale and Genie. But there's a way around that, natch. The Terminal application provides you access to raw Unix code and settings, allowing you to make tweaks you otherwise couldn't.

Achtung Hackers!

While most of the hacks here are fairly safe and harmless, you should only make modifications to your system if you're OK with the worst-case scenario: losing all the data on your machine. Of course, that happens rarely; you're more likely to screw up the file or app you're hacking. Here are some precautions and words of warning:

1. Back up before you try anything.
2. Keep a bootable CD by your side in case something should go wrong.
3. Whenever you can, make a copy of a file you are going to hack. This way you'll have a duplicate for restoring your system.
4. Remember that each system is different. What works on our Macs may not work on yours.
5. Follow our instructions! Don't stray or you could end up in a bind.

Intermediate Hacks

A little more complex, but nothing too difficult.

X GEEK SPEAK: Use the Terminal to Tweak Your Mouse Scaling Defaults ENGLISH: Speed Up Your Mouse

Many Mac users like their mice so twitchy that a small gust from the heater kicking on sends their cursor to the other side of the screen. Some third-party mice come with software that allows you to adjust this setting beyond the norm, but if you're stuck with either an Apple-branded mouse or a third-party mouse that doesn't yet have Mac OS X drivers available (cough, Microsoft!), you're out of luck if you want to increase your mouse-tracking speed beyond what the System Preferences allow. Or are you?

How to Do It

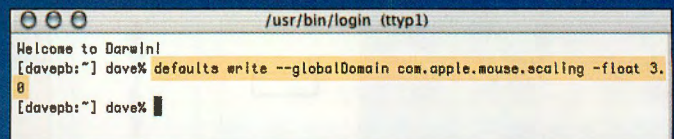
STEP 1: Open the Terminal program (inside the Utilities Folder). You will see a window with a flashing cursor at a command prompt. This window is a shell for Mac OS X's underlying Unix environment (for more info on the Terminal, see "Terminal Trouble," p26). At this prompt, type the following and press Return:

```
defaults write --globalDomain  
com.apple.mouse.scaling -float 3.0
```

STEP 2: Now close that Terminal window by typing `logout` and pressing Return, or if you really want to be Mr. or Ms. Joe Cool Unix Hacker, you can simply press Control-D to accomplish the same task. That's it! You're done.

Too fast for you? Change mouse tracking back to the default setting by issuing the command below in the Terminal (or try different float values between 1.7 and 3.0 for various options).

```
defaults write --globalDomain  
com.apple.mouse.scaling -float 1.7
```



By typing the right command into the Terminal window, you can speed up your mouse instantly!

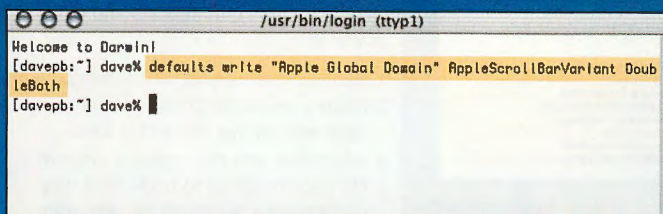
X GEEK SPEAK: Hit the Command Line to Unlock Hidden Scroll Options ENGLISH: Customize Your Scroll Bars

Mac OS 10.1 gives you two choices when it comes to window scrolling. You can either have single scroll arrows at either end of the scroll bar (one at the top and one at the bottom), or both arrows at the bottom of the scroll bar (access these options in the General System Preferences pane). There is one more option, though—having both arrows at *both* ends of the scroll bar. Apple didn't openly give users the ability to enable this feature, but why should that stop you?

How to Do It

STEP 1: Open up the friendly Terminal application. At the prompt, type:

```
defaults write "Apple Global Domain"  
AppleScrollBarVariant DoubleBoth
```



Don't worry if the command doesn't fit on one line. Just keep typing—the system won't process what you've typed until you press Return.

STEP 2: Now you must either log out completely and log back in, or quit and relaunch all your applications (including the Finder) to make the change take effect systemwide.

STEP 3: To set your scroll bars back to normal (with the up arrow at the top of the scroll bar and the down arrow at the bottom), type:

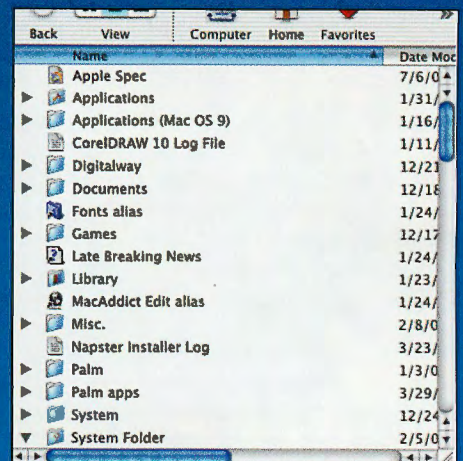
```
defaults write "Apple Global Domain"  
AppleScrollBarVariant Single
```

And to set your scroll bars so that both arrows are at the bottom, type:

```
defaults write "Apple Global Domain"  
AppleScrollBarVariant DoubleMax
```

If you don't like living on the Unix edge, just go to the General System Preferences and change your scroll options. But you're a hacker now—why do things the easy way?

See what a little Unix can do? Now we have a complete set of scroll arrows—top, bottom, right, and left.



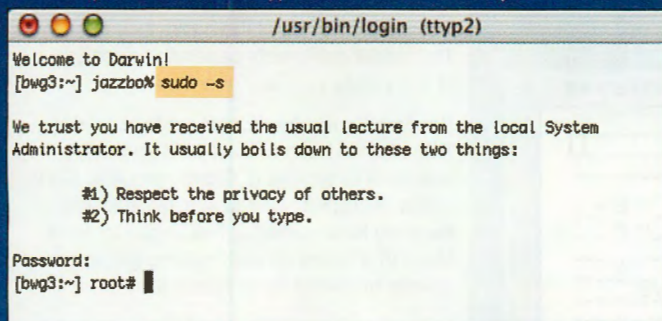
GEEK SPEAK: Modify Your TCP/IP RWINS and Others to Maximize Network Performance

ENGLISH: Make Your Broadband Soar

Despite Apple's contention that Mac OS X will automatically tweak itself for optimal performance, this isn't entirely true. By making a few surgical strikes to the system's network-configuration settings, you may be able to speed up your broadband connection (which typically has some extra bandwidth available that it could use more efficiently). Those of you who have direct DSL or cable connections (and are not going through a router) will most likely have the most luck with this hack.

How to Do It

STEP 1: Open the Terminal. Type `sudo -s`, press Return, and enter your password when prompted. This command will put you in root mode so you won't have to type `sudo` in front of every command.



```

/usr/bin/login (tty2)

Welcome to Darwin!
[bwg3:~] jazzbo% sudo -s

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these two things:

    #1) Respect the privacy of others.
    #2) Think before you type.

Password:
[bwg3:~] root#
```

The `sudo` command lets Admin-specified users become the root user, or system administrator, without logging out.

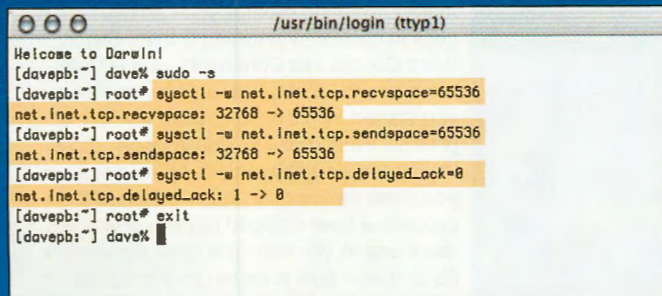
STEP 2: Type the three commands below, following each with a Return:

```
sysctl -w net.inet.tcp.recvspace=65536
```

This line increases the receive buffer, which allows the computer to receive larger packets of data before stopping the flow and responding to the appropriate host. Ideally, the fewer times your Mac has to acknowledge the receipt of a package, the faster the overall transfer (since the sending computer doesn't have to wait for a response as many times before sending more information). The default `recvspace` value is 32768—here you're changing this value to its maximum.

```
sysctl -w net.inet.tcp.sendspace=65536
```

This is the send buffer, which functions in the same way as the receive buffer except that it affects uploads, whereas the receive buffer affects downloads. For most folks, this setting won't matter as much, but if you tend to send large email attachments or upload pictures to your Web site, you may notice a difference if you play with this setting.



```

/usr/bin/login (tty1)

Welcome to Darwin!
[davepb:~] dave% sudo -s
[davepb:~] root# sysctl -w net.inet.tcp.recvspace=65536
net.inet.tcp.recvspace: 32768 -> 65536
[davepb:~] root# sysctl -w net.inet.tcp.sendspace=65536
net.inet.tcp.sendspace: 32768 -> 65536
[davepb:~] root# sysctl -w net.inet.tcp.delayed_ack=0
net.inet.tcp.delayed_ack: 1 -> 0
[davepb:~] root# exit
[davepb:~] dave%
```

By entering the proper commands, you can potentially speed up your broadband connection.

```
sysctl -w net.inet.tcp.delayed_ack=0
```

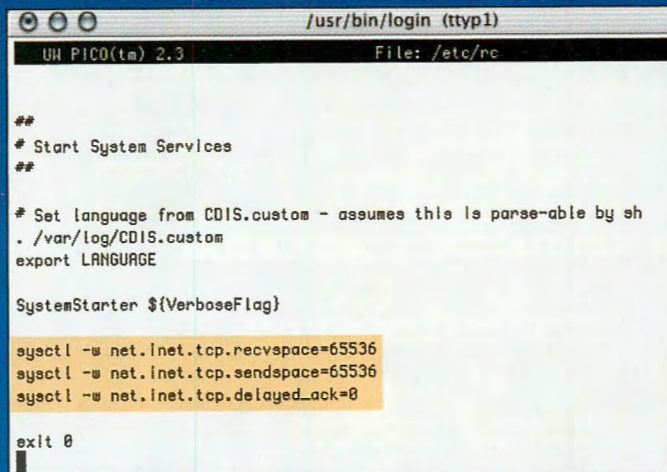
As we said, the system responds to the information sent by hosts, letting them know that the data made it through intact. However, by default the system waits to send this response until it has something else (like a request for another piece of data) to send, and then piggybacks the response on top of that second request. While this practice appears silly, it actually makes sense over slower connections, where you don't want to waste bandwidth. But you've got broadband, baby, and the default setting can slow you down since the host computer will wait longer than necessary to send you the next packet. By setting this option to 0 (1 is the default), you're telling the computer to send its response immediately, which can dramatically increase the perceived speed of large downloads.

STEP 3: Type `logout` to log out of root mode, then type it again to log out of the Terminal (or just press Control-D twice). The best way to test whether your tweaks are in working order is to head to one of the various bandwidth-testing sites on the Internet (we like DSLReports, www.dslreports.com) and use those tools to see what kind of results you're getting. If you are on a network at your place of work, oftentimes the internal routers do their own routing translation, so you may not notice a speed difference.

STEP 4: This hack only works for the current session. If you reboot your machine, the settings you just tweaked revert to their defaults. However, if you test them and like the results, you can modify one of the startup files to make these settings change automatically every time you start up your machine. To do that, type the following into the Terminal:

```
sudo pico /etc/rc
```

With the arrow keys, scroll all the way down to the bottom. The last line should read `exit 0`. Position the cursor right above that line and type the three commands from step 2 again, one per line. Press Control-X to exit, press Y when the Terminal asks if you want to save, and you're all set. Now the system will change your broadband settings each time you boot up.



```

/usr/bin/login (tty1)

UH PICO(tm) 2.3                               File: /etc/rc

##
# Start System Services
##

# Set language from CDIS.custom - assumes this is parse-able by sh
. /var/log/CDIS.custom
export LANGUAGE

SystemStarter ${VerboseFlag}

sysctl -w net.inet.tcp.recvspace=65536
sysctl -w net.inet.tcp.sendspace=65536
sysctl -w net.inet.tcp.delayed_ack=0

exit 0
```

By adding these commands to your `/etc/rc` file, you can set them to change automatically at startup.

Advanced Hacks

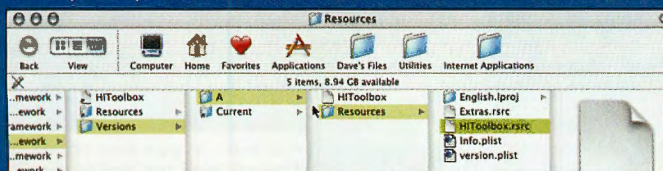
Stepping up the level of trickery—and treachery.

GEEK SPEAK: Modify the HIToolbox.rsrc to Customize Your Icons ENGLISH: Change Your Trash Icons

Mac OS X introduces a beautiful new icon architecture that allows you to pepper your desktop with resizable, full-resolution icons. But what if you want to change one of them? You can change folders and hard drive icons the old-fashioned way (as long as you're an Admin) using good ol' copy and paste. But if you want to change, say, the default icon for CDs or the Trash, the process is not that straightforward. Follow these steps and you'll be well on your way to making your Mac truly *your* Mac.

How to Do It

STEP 1: Locate the file `HIToolbox.rsrc`. You'll find it in the following hierarchy of folders: `System > Library > Frameworks > Carbon.framework > Versions > A > Frameworks > HIToolbox.framework > Versions > A > Resources` (ever get the feeling that someone doesn't want you to find something?). Hold down the Option key and drag this file to the desktop to make a duplicate. This step is imperative—the hack won't work if you skip it.



The `HIToolbox.rsrc` file, buried deep within the System Folder, is where you'll find all of the System's default icons.

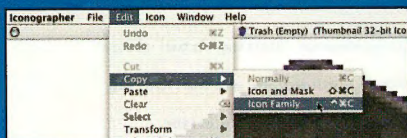
STEP 2: Grab a copy of Mscap Software's Iconographer X (\$15) off the Disc or from www.mscap.com/products/iconographer.html, making sure you get version 2.2 or later, as this includes support for what you're about to do. Launch Iconographer. From the File menu, choose Open Icon. Navigate to your desktop and select `HIToolbox.rsrc`. You should now see a *long* list of icons.



The `HIToolbox.rsrc` file contains hundreds of icons for your system resources, including the two Trash icons.

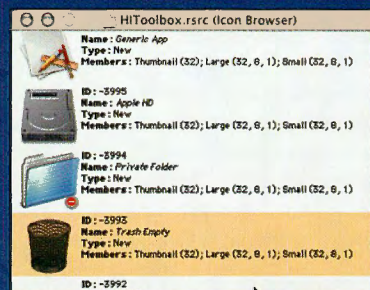
STEP 3: Go online and choose a replacement Trash icon or make your own (see "Make a Mac OS X Icon," p66). For our purposes, we chose one of Mikkel Madsen's creations called Purple II, available at www.mmicons.com. Just remember that you need two icons: an empty trash can and a full one.

STEP 4: Open the empty Trash icon within Iconographer, the same way you opened `HIToolbox.rsrc`. From the Edit menu, choose Copy, and then Icon Family from the submenu.



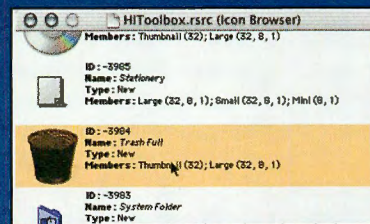
Make sure to choose Icon Family when copying your icons within Iconographer—otherwise the backgrounds won't come with them.

STEP 5: In `HIToolbox.rsrc`, scroll down to Icon ID -3993 (which correlates to the empty trash can) and double-click to open that family. From the Edit menu, choose Paste, and then Icon Family from the submenu. Close the window and agree to save the changes.



Icon number -3993 is the one you want to replace.

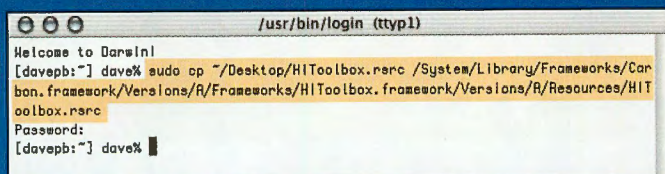
STEP 6: You're done with the first half! Now just repeat steps 4 and 5 with the full-trash icon (ID -3984). Quit Iconographer once you're finished making changes to the icons.



Another page or two down from Trash Empty, you'll find Trash Full.

STEP 7: Now you need to put the modified copy of `HIToolbox.rsrc` in the proper place so the system will use it. Unfortunately, only root users can modify the Resources folder—just dragging this file back into that folder will result in an error. At this point, you have two options. The first is to use your previous hack of making a version of Finder that runs as root (see "Gain Easy Access to Finder Files," p22) using the program Pseudo, which will allow you to drag and drop your file into the Resources folder. The other option is to open Terminal and type the following command:

```
sudo cp ~/Desktop/HIToolbox.rsrc /System/Library/Frameworks/Carbon.framework/Versions/A/Frameworks/HIToolbox.framework/Versions/A/Resources/HIToolbox.rsrc
```



You need to be a root user to replace the `HIToolbox.rsrc` file. These are the commands you enter in Terminal.

STEP 8: When you're done, log out of your Mac, log back in, and enjoy your new icons!



Enjoy your new Trash. You deserve it.

GEEK SPEAK: Move Your Virtual Memory Swap File to Another Drive or Partition

ENGLISH: Free Up Hard Drive Space

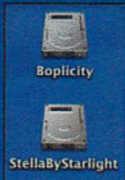
You all know Mac OS X is based on Unix, and you all know (or at least can pretend to know) that Unix has an awesome virtual-memory system built in. What you don't know is that Apple chose to implement Mac OS X's virtual memory in a somewhat unorthodox fashion. Most Unix systems designate a completely separate partition for its *swap files* (files the operating system uses to store disk info that won't fit in RAM). However, Apple has set Mac OS X to put the swap files on the same volume as all of your other data—but for good reason. Imagine telling users they need to repartition their drives just to run Mac OS X.

Unfortunately, Apple's method can cause a few problems. Number one is that the swap files are fixed at about 80MB in size (76.2MB, to be nitpicky). These files are normal files, and they suffer from the same fragmentation issues that plague the rest of the stuff on our hard drives. Having a fragmented swap file isn't good, especially if you're low on RAM because that's when your system is most likely going to use a swap file. To solve this problem, you can tell Mac OS X to put its swap file(s) on another drive or partition, which can greatly improve your system's performance, depending on how fragmented and full your drive was to start with. The reasoning is that if your swap partition starts out completely empty, and the only files the system creates there are 80MB swap files, then you'll only have 80MB chunks of space on the drive. This eliminates the fragmentation that would happen if you were also saving (and deleting) applications, documents, and other files of different sizes on the same partition. **Beware: This is a potentially dangerous hack. Proceed with caution!**

For this hack, you'll first have to reformat your drive (or install another drive) and set aside a small HFS+ partition (250MB to 750MB is more than enough). You can also use an external drive—but be careful when you disconnect it (see "Warning!", p29). Since this hack is for truly hard-core users, we're going to assume you know how to reformat a drive. Once you're done, read on.

How to Do It

STEP 1: Choose a name for the drive or partition you wish to use as a swap device. Name it anything you want, but don't use spaces. StellaByStarlight is the name of our partition.



Create a new partition, making sure it doesn't have spaces in its name.

STEP 2: Most of what you're about to do requires that you be in root mode. Get thee to a Terminal window, and set yourself up as root by typing `sudo -s` and pressing Return. Type `df -k` and look at the list to determine your partition's Filesystem location—the first column in the listing, this information typically starts with `/dev`. Filesystem describes the specific disk and partition your Mac is using for a given volume. StellaByStarlight is using Filesystem `/dev/disk0s7` and is mounted on `/Volumes/StellaByStarlight`. Make a note of these details.

```

Password:
[bwg3:~] root# df -k
Filesystem            1K-blocks    Used    Avail Capacity    Mounted on
/dev/disk0s6          18758992  1271372  9479628    11%      /
devfs                  38         38         0    100%     /dev
/dev/disk0s7          3361748   68496   3273252     2%      /Volumes/StellaByStarlight
fdesc                   1          1         0    100%     /dev
<volfs>                512        512         0    100%     /.vol
automount -fstab [255] 0           0         0    100%     /Network/Servers
automount -static [255] 0           0         0    100%     /automount

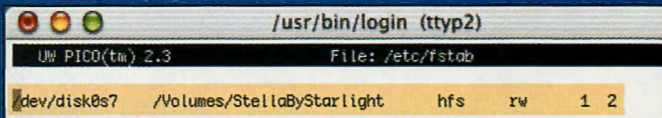
```

If we type `df -k`, we see that our StellaByStarlight drive is located at `/dev/disk0s7`—your info will likely be different.

STEP 3: Since the system initializes the swap file at the beginning of the system startup sequence to refresh it with the current data, you need to tell the system to bring this new partition online earlier than it normally would. (Mac OS X typically brings only the boot volume online at the beginning of the startup process.) Create an entry in the `/etc/fstab` file (located in `/Hard Drive/etc/fstab`). This file contains a list of the drives (and their respective Filesystems) that the system will mount at startup. From the command line, type `pico /etc/fstab` and press Return. You'll end up in a text-based editor window. Type the following, all on one line with spaces between each block (but make sure you replace our Filesystem info with your own):

```
/dev/disk0s7 /Volumes/StellaByStarlight hfs rw 1 2
```

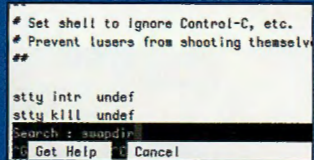
Once you've typed these commands, press Control-X (aka exit), Y, and Return to save your changes to this file.



Add the proper syntax to the `/etc/fstab` file to tell your Mac to mount your swap drive early in the startup process.

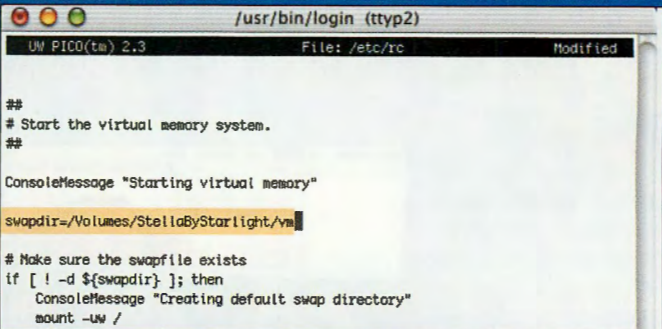
STEP 4: Now that you've created the new swap partition and told the system to mount it early enough in the startup process, you need to tell the system to use this partition as your new swap-file storage location. From the command line, type `pico /etc/rc` and press Return. This opens up another text-editor window, this time with a file full of shell-script commands that tell your Mac how to start up. From here, be sure to follow our directions exactly, otherwise your Mac may never boot properly again (and that would suck).

Find the right location to edit. Press Control-W, type `swapdir`, and press Return. Terminal should bring you to a line that says `swapdir=/private/var/vm`.



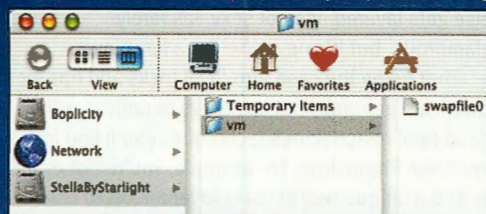
Pressing Control-W, then typing the word `swapdir` and pressing Return tells pico to search the entire document for a specific bit of text.

STEP 5: Using only the keyboard, you must position your cursor at the end of this line, and completely delete the `/private/var/vm` portion. Replace this with `/Volumes/StellaByStarlight/vm` (using your own info, of course). Our final line reads: `swapdir=/Volumes/StellaByStarlight/vm`. Now press Control-X, type Y for yes, and press Return to save the file to disk.



Replace `/private/var/vm` with the proper path to your partition.

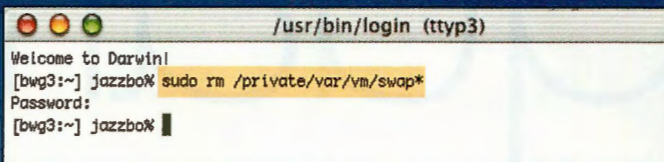
STEP 6: Restart your Mac. Assuming you've done everything correctly, you should see a folder on your new disk titled *vm* (short for virtual memory, presumably), and within it a file named *swapfile0*, where your system will now store any data it needs to hand out from RAM to the disk. If this file exists, give yourself a big pat on the back!



After you restart, you should see a folder titled *vm* on your new disk. If you do, congratulations!

STEP 7: Hold your horses! Chances are your Mac still has an old 76.2MB swap file it no longer needs. In Terminal, type `sudo rm /private/var/vm/swap*`. This command deletes the old swap file(s) and frees up space. To revert your system to the way it was (and store your swap files in their original location), change the `/etc/rc` file to read `swapdir=/private/var/vm`. You can also remove the swap partition, and OS X puts the files back on your original drive,

albeit in the Volumes folder—this method is a bit unorthodox, but it won't break anything. And that's what's important.



Removing the old, unused swap file from your main hard drive will free up at least 75MB of space—maybe more.

WARNING! This hack involves telling your system specifically which drive to look for when creating swap files. If your drive configuration remains the same, you won't have any problems. However, if you remove or change the drive containing your new swap files, Mac OS X will either put the swap files back on your main drive (in the Volumes folder) or put them on another drive (to restore your swap files to their original location, see step 7). Bottom line: Be über-aware of the way you configure your drives, and make the appropriate changes should you choose to rearrange them after performing this hack.

GEEK SPEAK: Hack MENU Resources to Create a New Keyboard Command ENGLISH: Create a Shortcut for Hide Others

Have you ever been working in an application and wanted to purge your desktop of everything except what you're working on? Sure, you can slide your cursor all the way up to the right corner of your screen and choose Hide Others—but that's a lot of mousing for a busy person like yourself. Enter this hack, which allows you to add a keyboard shortcut for your Hide Others menu.

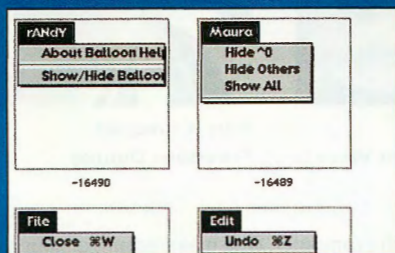
How to Do It

STEP 1: Make a copy of your System file. In ResEdit, open the System copy that now exists in your Mac's System Folder (you want to work on the copy—you *never* want to work on a live System file unless you don't value your Mac). Double-click the MENU resources—the System file contains lots of resources, but thankfully ResEdit organizes them alphabetically.

Scroll down to find the MENU resource bundle, then double-click it.

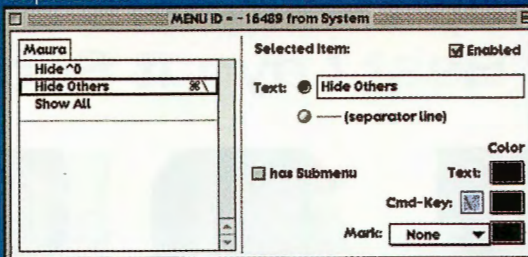


STEP 2: You'll see a handful of resources, but you want one named Maura. (Incidentally, there's another one here called rANdy—who says the Mac OS doesn't have any more Easter eggs?) When you find Maura, double-click it.



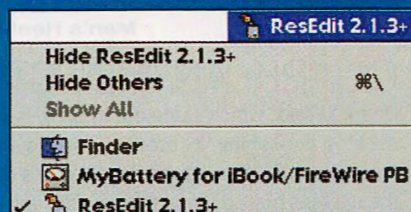
Double-click the Maura resource (but not if she's sitting right next to you...that would be rude).

STEP 3: You'll see a list of menu options—click Hide Others once. Now you'll see a list of options you can set. Look for the box next to Cmd-Key and type whatever keystroke you want to use in combination with the Command key to enact this menu item. Bear in mind that it shouldn't be anything your other apps use, lest the system get confused. We used the backslash key, and thus far it hasn't given us problems.



By putting a backslash into the Cmd-Key option, we can set a keyboard shortcut for hiding other applications.

STEP 4: Quit ResEdit and agree to save changes to the System copy. Now throw your existing System file in the Trash (but don't empty it yet). Rename *System copy* as *System* (or to play it really safe, just move the System file to your desktop). Restart your Mac. Assuming everything worked correctly, you should now be able to press Command-backslash to hide applications. If all is working properly, go ahead and empty the Trash.



Once you restart, check your Applications menu to see if the new shortcut appears.

Dave Hamilton, president of the Mac Observer (www.macobserver.com), spent many of his formative years tweaking Unix systems before moving to the Mac. The fact that Mac OS X is based on Unix still brings a tear of joy to his eye.

quark pros tell all

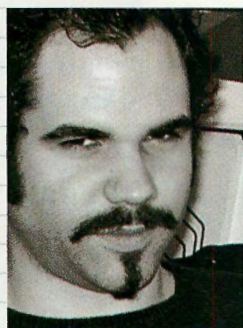
If graphic design were a band, QuarkXPress would be the bass player. It doesn't have the presence required to be the glamorous front man—that job would be better held by apps such as Photoshop, Illustrator, or FreeHand. Instead, QuarkXPress is the app in the background, quietly supplying the foundation upon which everything else gets layered. It's not sexy, it's rarely glamorous, but it's nevertheless a key player.

That being the case, pro-level tricks and tips for Quark are generally not as stylish or radical as the deep pool of audacious techniques you'll find for apps like Photoshop. For example, you're not going to find a unique way of using layer masks to create an effect, or a hot new technique for using a combination of filters to distress type. Rather, Quark's tips, tricks, and secrets are the time-savers, problem solvers, and quick fixes that save your butt at the end of the day.

To get some insight into the hidden gems of this pragmatic instrument, we turned to some experts in an industry that depends on using QuarkXPress as efficiently and effectively as possible (not to mention an industry that's near and dear to our heart)—magazine publishing. We talked to people in the design trenches at publications including *Wired*, *Men's Health*, and *Entertainment Weekly* to find out some of their best Quark techniques. And the fun doesn't stop there. The new version of Quark is now out (sorry, Mac OS 9 only), and it brings a slew of new goods. We went right to the mothership—Quark itself—for an inside look at some of Quark 5.0's hottest features. (Visit www.quark.com to download the beta or demo version, and look for our review in a forthcoming issue.)

by Robert Capps

Five Top Designers Share Their Best Layout Secrets



Eric Siry
Wired Magazine



George Karabotsos
Men's Health



John Walker
Entertainment Weekly



Ken Bousquet
Freedom Deluxe

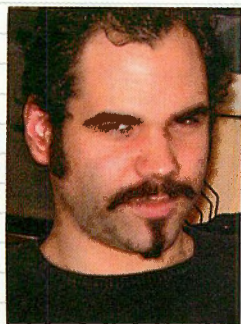


Louis Landa
Quark

QUARK: AN INDUSTRY GIANT

Quark XPress, which came out in 1987, is the de facto standard for desktop publishing. Its production- and artist-friendly capabilities—more powerful than Adobe PageMaker's at the time—were some of the reasons newspapers, magazines, and design houses were able to move from doing layout by hand (anyone remember paste-up?) to

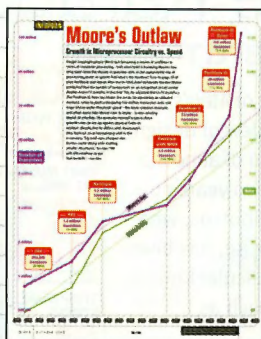
the computer. (The main reason, of course, was Apple's push into desktop publishing with machines powerful enough to handle the process.) To this day, Quark remains the leader and standard in desktop publishing and an integral tool for art directors and graphic designers.



Eric Siry Wired Magazine

Eric Siry's current job is assistant design director for *Wired* magazine, but he's been working professionally as a graphic designer for more than 12 years, the entire time using QuarkXPress. Before coming to *Wired* he was assistant art director

at *Rolling Stone*, and between the two jobs, he's piled up his share of shortcuts.

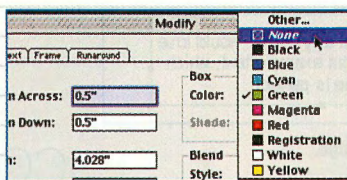


DROP SHADOWS

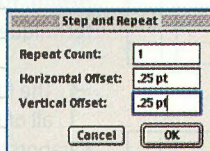
When adding a drop shadow to your text, Siry recommends that you avoid QuarkXPress's Shadow command. It looks terrible, offers very little control, and can create problems with your service bureau. Instead, make a shadow with Quark's Step And Repeat function.

Make a text box and enter the text to which you want to add a shadow. Set the box to no color and no runaround. Select Step And Repeat (from the Item menu or using Option-Command-D), and opt for no horizontal and no vertical offset. Select the original text box (it's now underneath the duplicate), and change the text's color to the color you want your shadow to be.

With the layer underneath still selected, open the Step And Repeat dialog and enter a small horizontal and vertical offset (for example, .25 points). Choose Step And Repeat again until you reach the thickness you desire. (For instance, if your offset is .25 points, you'd perform that action 16 times for a 4-point drop shadow.) You can change the offsets to alter the direction and angle of the drop shadow. Always keep the size of the offset small (1 or 2 points) to minimize the stair-step effect along the edges. This method also works for boxes and rules.



Set the color and runaround of your original box to None.



Step And Repeat, and...uh, repeat until you have that perfect width.

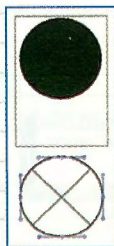


Step And Repeat your way to superior drop shadows.

TWO TEXT TO BOX TRICKS

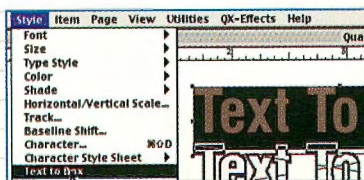
QuarkXPress's Text To Box feature can be a flexible tool for making unique text or picture boxes. Here are two types of boxes Siry likes to use:

1 When you convert a circular box to a freeform shape using the Shape submenu, instead of getting the logical four Bézier control points at the extremes, you get eight Bézier control points, making the circle more difficult to reshape. But you can create a circle with four Bézier control points by typing a lowercase l in a large point size in Zapf Dingbats and applying Text To Box. For that matter, you can create a lot of otherwise difficult-to-make box shapes, such as pentagons and hexagons, using dingbat fonts and symbol fonts.



Use symbol fonts to make text boxes.

2 You can use Text To Box and a frame to make outlined text that has much greater flexibility than you get with Quark's Outline feature (type created with this feature must be white, and it has incorrect spacing). Using Text To Box, you can change the width and style of the frame and even pick a color for the type itself. Just remember that once you've converted it via Text To Box, you can no longer edit your text.



Use Text To Box for better text outlines than Quark's Outline feature can offer.

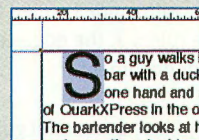
QUICK TIPS

Multiple Baseline Grids

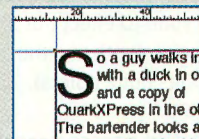
If you're using several sizes of text with different leadings in one document, you can lock them all to the baseline grid (for those who still can't get these terms straight, leading is the spacing between lines and kerning is the spacing between letters). Choose leadings with a nice round number as a lowest common denominator that you can then use for the baseline grid's increment. For instance, if you specify your three different leadings as 24 points, 16 points, and 12 points, you can make your grid increment 4 points and they'll all lock neatly to the baseline grid.

Deal with Difficult Drop Caps

When you create a drop cap, sometimes the space to the left of the letter can start to look like an indent, especially as the cap gets bigger. You can nudge the letter to the left by specifying a two-character drop cap in the Formats dialog box, typing a space before the cap, and kerning the cap back into the space until it aligns visually with the left edge of the text.



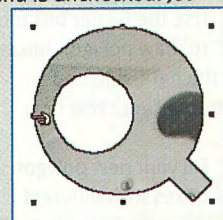
Start with a two-space drop cap...



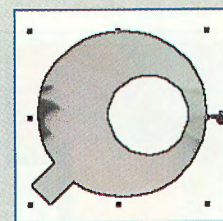
...and kern until it's flush with the text edge.

Flip an Irregularly Shaped Box

Here's a simple way to flip an asymmetrical box: Make sure Edit Shape under the Item menu is unchecked. Jot down the box's width (or height, if you're flipping it vertically) from the Measurements palette. Then grab the middle handle of one side and pull it across the other handle. The shape will reverse. Enter the original width or height into the Measurements palette to finish off the box.



Note the width of your original box.



Here's the same box, flipped to perfection.



George Karabotsos

Men's Health

The clean, clever layout of *Men's Health* has earned it a slew of design awards and a circulation of almost 2 million. For more than two years now, Art Director George Karabotsos, who has used Quark since 1989, has been the man behind the muscular look. In

the past he has also worked with top-notch pubs such as *Entertainment Weekly*, *Worth*, and *Golf and Travel*.



QUICK TIPS

Quick Character Tweaks

Did you know that you can reduce or enlarge the width of a line the same way you adjust the point size of a character? Just press Command-Shift, plus the right-angle bracket (>) or left-angle bracket (<) to resize the line by 2 points, or Command-Shift-Option, plus > or < to resize the line by 1 point.

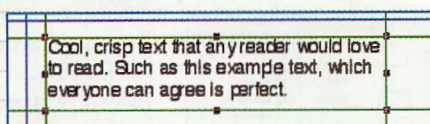
Registration Buffer

If you are reversing fine type out of a background of rich black (rich blacks have all four colors) and are worried about registration, adding a thin (.2-point) drop shadow can quell your fears. Putting a thin drop shadow to the right and bottom of your text, or even all the way around it, provides a single-color (black) buffer against the background. This process should prevent registration problems.

3D BOXES

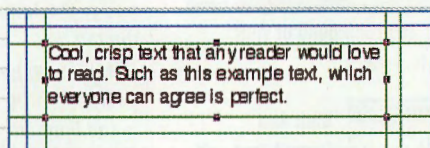
Karabotsos uses a simple yet effective technique to make a cool 3D effect for your text box. Follow along:

1 Surround your text box with guides pulled from the rulers at the edges of your document.



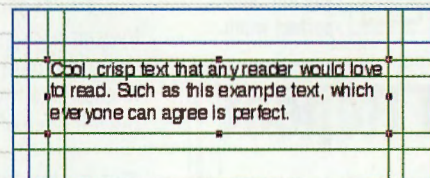
Pull guides from the edge.

2 Place additional guides outside the bottom edge and off to the right side to the desired depth for your 3D effect (for a 4-point depth, set the guides out 4 points).



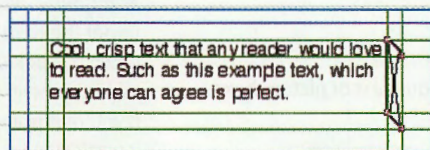
That's how wide our depth will be. Huh?

3 Add a second set of guides inside your box on the left side and near the top. Make these guides the same distance from the original box as your first set of guides (4 points, for example).



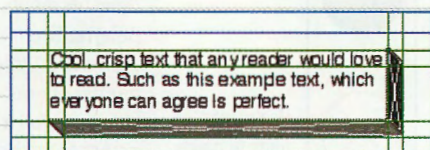
Guides everywhere!

4 Use the Bézier box tool to draw polygon boxes on the right side and bottom of your text box.

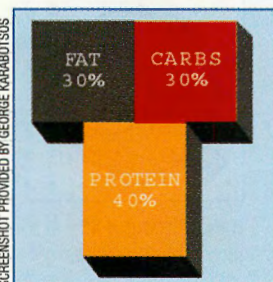


Draw boxes with the Bézier box tool.

5 Fill your new polygon boxes with different colors or shades of a single color. Try using a linear gradient and more colors to enhance the effect.



That's deep, man, that's really deep.



There you have it: easy 3D boxes in action—and the key to dieting.

COMPLEX DROP CAPS

Drop caps can come in all kinds of shapes and sizes. Here is an example of a unique drop cap Karabotsos has used in *Men's Health*. You can make many drop-cap variations using this technique, so experiment a little!

1 The first step is to set fonts, font sizes, and baseline shifts for all of the text in the paragraph. Here's a look at what Karabotsos used in this example:

Start with a first line containing all of the drop cap's elements as one word, in this case

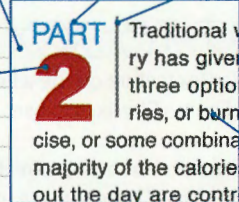
"PART2|" (that's a vertical slash, also known as a *pipe* or *stove pipe*, not a 1).

The numeral 2 is set to 6.5-point Helvetica Black (if you don't have that typeface, try plain Helvetica).

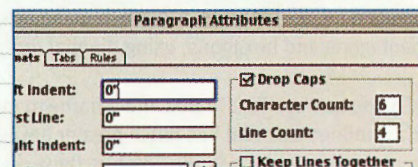
The word PART is 2-point Helvetica with a 5.15-point baseline shift (select this from the Style menu).

The slash is 9.35-point Helvetica at 50 percent black, with a baseline shift of 0.15.

The body text is 9-point Helvetica with 12-point leading.



2 Only after you format the text should you turn on the paragraph's Drop Caps function (on the Formats tab of the Paragraph Attributes dialog). Set Character Count to 6 and Line Count to 4.



After the prep work is done, turn on Drop Caps.

3 Track everything into place. In this case the tracking between PART and 2 is -450 (center the 2 underneath the word PART); the tracking between the 2 and the slash is 25; and the tracking between the slash and the first character of the body copy is 40.

John Walker

Entertainment Weekly

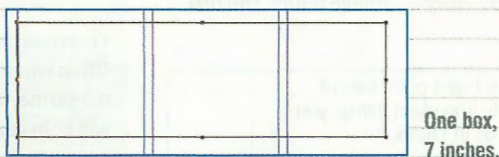
Entertainment Weekly not only sports one of the most highly acclaimed design styles in the business, but it keeps up its award-winning look at a frenetic weekly pace. Art

Director John Walker has managed this quality-and-quantity one-two punch for more than five years now, building on a design background that goes back two decades. Here are some of the tricks that keep Walker on the fast track.

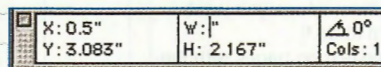
THE MATH WAY

Sometimes you end up with an awkward space in which you want to place, say, a group of three picture boxes. While you may be tempted to create these boxes by eyeballing it, Walker suggests enlisting the help of the Measurements palette to make the box sizes and spacing exact. In this example, you'll make three evenly sized and spaced boxes, each 2 inches wide, with a .5-inch gutter between them. We chose simple numbers to demonstrate the process, but this tip can come in useful if you have a weird amount of space.

1 Create a box 7 inches wide (or however wide your total space is).

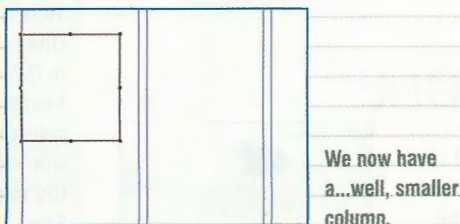


2 Select the width indicator on the Measurements palette and subtract the total amount of space between columns (in this case, two spaces at .5 inches each, so a total of 1 inch). Therefore, you want to enter the number 6 for width.

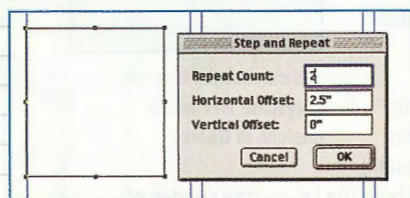


Type the width in inches that you need here—in this case, 6.

3 Divide the new width by the number of columns you want (in this case, three) and enter that number next to the width indicator in the Measurements palette. You now have a single column the right size for your space.

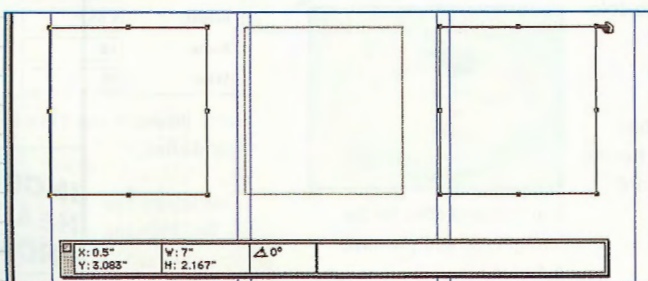


4 Select Step And Repeat from the Item menu. For Repeat, enter the amount of additional columns you need (two) with a horizontal offset that equals the width of the column (2 inches) plus the amount of space you want between columns (.5 inches).



Utilize good ol' Step And Repeat to finish the job.

Make evenly spaced, evenly sized boxes with some deft work of the Measurements palette.



QUICK TIPS

Format Mimic

The reviews section of *Entertainment Weekly* features a series of paragraphs delineated by thin lines, or rules. Rather than go through the process of making a new rule for each paragraph, you can make the rule once and apply it in later paragraphs. Simply place the cursor in the new paragraph—the one that needs to do the mimicking—and hold down Option-Shift while clicking the first paragraph—the one you want to mimic. This trick works for all formatting, not just for rules.



Consistent rule formatting is the basis of the reviews section in *Entertainment Weekly*.

Reshape a Polygon

Walker says you can adjust one end of a polygon to create innovative boxes. Select your box, choose Shape from the Item menu, and select the freehand box (the one that looks like an artist's palette). This will allow you to edit the polygon's points. To delete or add points, hold down the Option key while selecting either the point to delete or the place on the line where you want to add a new point.

SPACE ALIGN

Often some of the best tips are simply forgotten features—for example the Space/Align command, which allows you to place one box (either text or picture) in an exact location on another box. *Entertainment Weekly* often uses this technique to place numbers on a picture, achieving uniform placement.

Here's how it's done: Once you have placed your picture in Quark, create a small text box for the number. Place the text box on top of the picture box. Select both boxes and choose Space/Align from the Item Menu, or type Command-comma.

In the Space/Align Items dialog, select both the Horizontal and Vertical boxes. Set Horizontal to Between: Right Edges and Vertical to Between: Bottom Edges, then click OK. Your text box will appear in the bottom corner of the picture. You can also use the Space Align command to space multiple boxes evenly on a page.



Move the number text box on top of the picture.



Voilà! Perfectly placed text boxes.

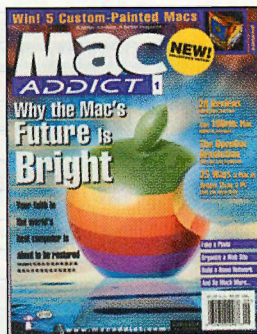


Ken Bousquet

Freedom Deluxe

If you're a longtime *MacAddict* reader, you may remember Ken Bousquet as our founding art director. Since he departed our pages, he's put in a stint at *Business 2.0*, and he now heads his own design firm, Freedom

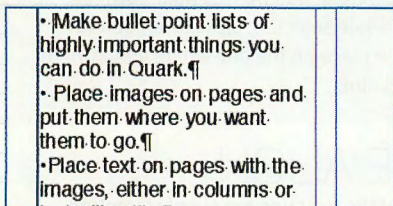
Deluxe, which specializes in marketing, logos and branding, and publication design. Here's a few tips he gave us, some of which you might recognize from *MacAddict* issues past.



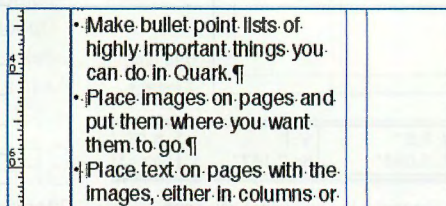
FLUSH BULLET-POINT PARAGRAPHS

When you create a series of paragraphs that start with bullet points, Quark by default sets the second, third, and all other lines following the bullet flush with the bullet rather than with the text of the first line. You *could* go to the subsequent lines and insert a few spaces to get the lines to indent properly, but as different letters occupy different amounts of space, this method of alignment often leads to noticeable inconsistencies within the paragraph. It also makes changing and reflowing text a time-consuming chore.

To avoid this dilemma, place the type cursor after the space following the bullet but before the first letter of the first line and type Command-backslash, the Indent Here command. Quark makes all following lines flush with that space. As soon as you enter a carriage return, the text falls flush with the original bullet.



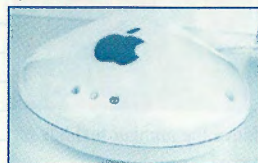
Bullet lists are supposed to *pop*, but this one's an eyesore.



A few quick keystrokes, and it's neatly aligned—beautiful!

QUICK-AND-DIRTY DUOTONE

Here's a trick for working with an illustration that you will be printing with either a single Pantone spot color or two mixed spot colors: Import the image as grayscale (or bitmapped) and color it in QuarkXPress. Coloring a grayscale image in Quark maps the selected color evenly to the percentages of black in the original grayscale, perfectly preserving gradients but using only the specified color.



Choosing a blue Pantone shade maps that blue to the black areas of the grayscale, leaving the light areas white.

You can likewise select a specific color for the image's background color (via the Color palette in Quark) to create a duotone. Colorizing both the image (the shades of black) and the background (the white areas) in Quark uses the printer to mix the colors in a two-color process, rather than having Photoshop mix the colors. This technique also lets you quickly change the color patterns for your spot-color illustrations without having

to go back to Photoshop. One caveat—as with any nonstandard print process, tell your service bureau what you're up to. For instance, our bureau told us this process doesn't work when outputting to PDF, only to fat PostScript.



You can quickly turn this grayscale TIFF into a duotone in Quark.

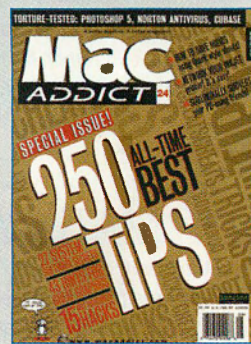


Add a second color for the background, and you have a duotone.

QUICK TIPS

Metallics and Black Text

Black text always defaults to overprint within Quark. This is fine for most documents, but if you wish to print over a metallic background, you have a problem. Metallic Pantones are thicker than black (metallic ink is heavier because it's infused with actual bits of metal), so your text will look soft or submerged. To avoid this problem, switch the text setting to Knockout. Of course, leaving the text as is will yield a faded black text look, which can be a neat background effect if that's what you're after.



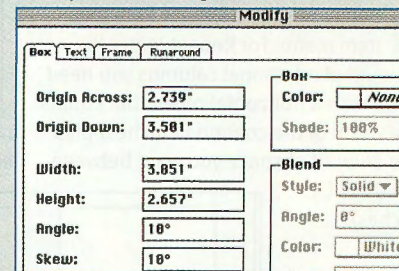
Bousquet overprinted the black text on thick metallic to get a faded look.

Overmatter

Often when laying out pages in a magazine, you end up with more text than will fit in your design (curse those verbose writers!). If you make overmatter boxes that are the same width as your original text columns, editors can easily identify how many lines they must cut to make the text fit.

Text and the Last Crusade

One cool type effect you can easily create in Quark is a slanted Indiana Jones-style headline. To achieve this look, simply select the headline text, open its Modify window, and enter the same percentage (try 10 percent) in both the Angle and Skew fields of the Box tab. Each line will start at the same point, but you'll have a cool upward-slanting effect.



Match the Angle and Skew fields for an instant effect.

This tabloid-like text begs you to read it.

INCREDIBLE HEADLINE PROMISE



Louis Landa Quark

The newly released QuarkXPress 5 promises much in the way of sorely needed new features (tables, anyone?). Since it's so new, version 5.0 is a relatively unknown entity—yet we wanted to give you some

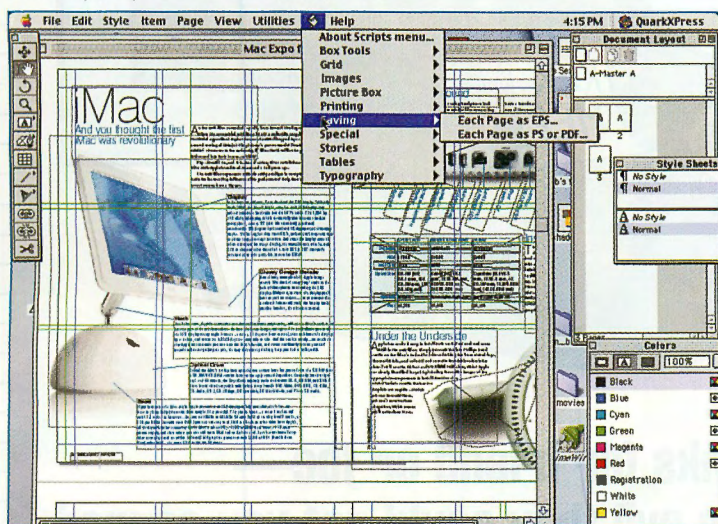
solid pro advice on using it as you make the transition. To gather this info, we went straight to the source—Quark itself. Louis Landa, manager of customer relations at Quark, hails from a newspaper design and production background (he's put in time at two local papers in Colorado). At Quark, he's responsible for making sure QuarkXPress has the features Quark's customers want; as a result, he's worked more with version 5.0 than just about anybody.



APPLESCRIPTS

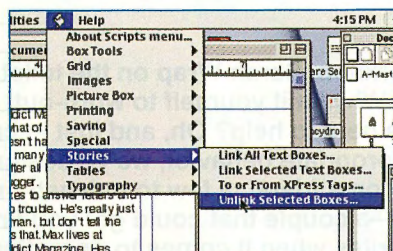
QuarkXPress has long been scriptable, but version 5.0 sports enhanced AppleScript support, and a handy-dandy scripting menu is built right in. The program even comes with some of the most popular scripts Quark could find. Here are two Landa finds especially valuable:

1 For designers and printers who have moved to an all-PDF workflow, the Each Page As PDF script allows them to save each page of a multiple-page QuarkXPress document as an individual PDF file with one stroke. This script requires Adobe Distiller, of course.



QuarkXPress 5.0 features easy output to PDF.

2 When you unlink a series of linked text boxes in QuarkXPress, the text reflows so that it's all contained in the first box. So, if you wanted the text to appear as it did when the boxes were linked, you have a lot of copying and pasting ahead of you. The new Unlink Selected Boxes script will leave your text in place while unlinking the text boxes.



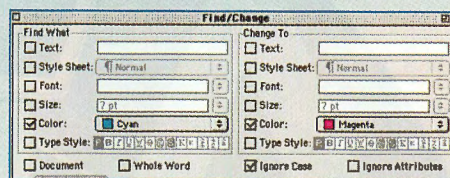
With the Unlink Selected Boxes AppleScript, we quickly separated two text columns without having to play with the text flow.

Robert Capps is the former editor in chief of *MacAddict*. He claims he's writing a novel. It's sad, really.

QUICK TIPS

Find/Change

Version 5.0 allows you to find and replace every instance of a color. To do this, open Find/Change from the Edit menu, uncheck Ignore Attributes, and check the Color box in both the Find What and Change To panes. Then just choose the color you want to banish and its replacement.



Universally swap one color for another in Quark 5.0.

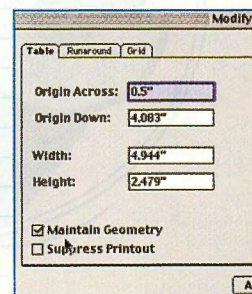
PDF Linking

QuarkXPress's new Hyperlinks palette allows you to make hyperlinks for Web publishing and to link different parts of PDFs. Select the section of text to which you want to link and make it an anchor by clicking the anchor symbol on the Hyperlinks palette. Give your link a name, then go to the word or phrase you want to hyperlink, select it, and double-click the anchor name in the Hyperlinks palette.

TABLES

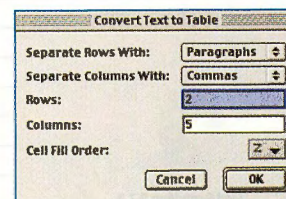
QuarkXPress 5.0 features an all-new table tool for quickly creating column- and row-delineated tables. Landa says the following two tricks might not be immediately apparent when you start working with tables.

1 You can easily adjust the size of the rows and columns in a Quark-made table by simply dragging the lines with the content tool. This will, however, adjust the overall size of the table as well. To adjust the size of the columns and rows without changing the size of the entire table, just select Maintain Geometry from the Table tab of the Modify dialog.



To retain a table's overall size, tell Quark to maintain geometry.

2 With version 5.0's new table features, you can quickly create tables from tab-, comma-, paragraph-, or space-delimited text. Just select your text and choose Convert Text To Table from the Item menu. You can even specify whether you want the text to go from top to bottom, bottom to top, left to right, or right to left.



Just select Convert Text To Table and specify the parameters of your table.

Steps	1	2	3	4
Do	Write text	Select text	Turn text into table	Position table

With Quark 5.0, you can turn comma-delimited text (top) into a table (bottom).




Find SoundApp 2.7.3
and Expression 1.3.5
on the Disc.

Perfect pranks for friend or foe— plus some so evil they could get you canned.

by Alan Stafford illustrations by Joshua Ellingson

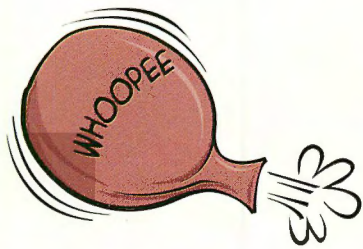
9 These tricks work
in Mac OS 9.

X These tricks are
Carbonized.

 These tricks are
for all our beloved
Wintel friends.

Vaseline on a doorknob. Saran Wrap on the toilet. Spring-loaded snakes in a can. Why limit yourself to worn-out, amateur April Fools' gags when we're here to help? Oh, and just in case you don't have a good handle on appropriate behavior, we've designed three levels of pranks: some to play on a friend, a few to unleash on a foe, or—if you're borderline unhinged—a couple that could get you fired.

We don't play favorites when it comes to operating systems, either: Many of these tricks apply to Mac OS 9, Mac OS X, and Windows victims. Oh, and one small favor? Don't tell your targets where you got your ideas—our lawyers are plenty busy as it is.



Friend

Play these clever but harmless tricks on people you like and who—today, at least—like you.

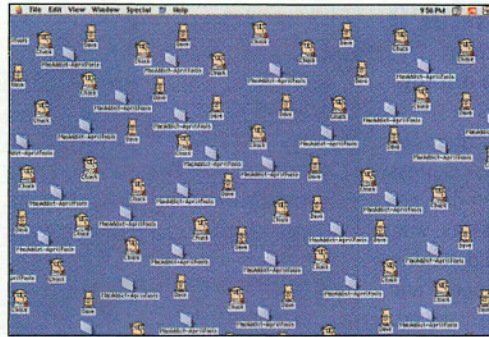
Dude, Where's My Hard Drive?

This prank hides the hard drive icon in a sea of inactive duplicates.

9 On your friend's Mac, hide the cursor in one of the corners, then press Command-Shift-3 to take a screen shot of the entire desktop. Copy the file to your own system and open it in Photoshop or another image-editing application. Drag a selection marquee over the hard drive icon; copy it, and then paste it into the same image. Move the copied icon to another region of the screen. Repeat this operation 20 or 30 times, scattering the icons around the image. Duplicate the image, and then flatten the image if your image-editing app requires it. Save the final image as a JPEG, copy it to a hidden location on your friend's hard drive, and use the Appearance control panel to set it as the desktop background.

Now drag the real icons to the very edges of the screen (where your mark will be less likely to find them). Open the General Controls control panel and uncheck the Show Desktop When In Background option—this will make live desktop icons and windows disappear when the Finder is inactive. Open up SimpleText—thus making it the active application, rather than the Finder—but close the SimpleText document window. Now, while SimpleText is open, clicking the desktop (the way many of us switch applications) will have no effect.


THE FIX: Check the Show Desktop option and replace the desktop picture with the original.



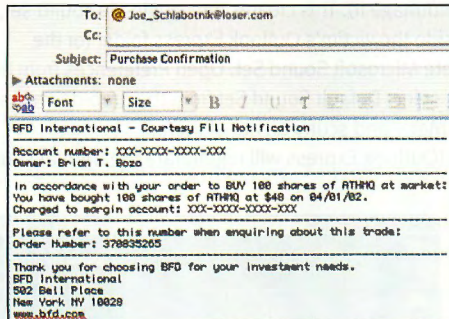
There's Waldo! Noooo... There's Waldo! Noooo...

The Dead-Dot-Com Deal

A stock-transaction email will make your victim think he's nosediving into bankruptcy.

9  Create a duplicate email account in Outlook Express or Entourage on your own Mac. Change the name and email address under Personal Information to simulate that of the brokerage your friend uses. As long as the account ID, password, and mail-server settings are correct, your friend will get the message. Now create a message with the subject line "Courtesy Fill Notification." Simulate an email notification for purchase of a failed dot-com's stock. Excite@Home is a great choice, but even better, watch the news on March 31 for the daily dot-com flame-out. Elevate the stock price to what it might have been before the bust, and include the words "Charged to margin account XXXX-XXXX-XXXX-XXXX." Make sure to include contact info for the brokerage so your mark has somewhere to blow off steam.


THE FIX: Break the news—then run like hell.



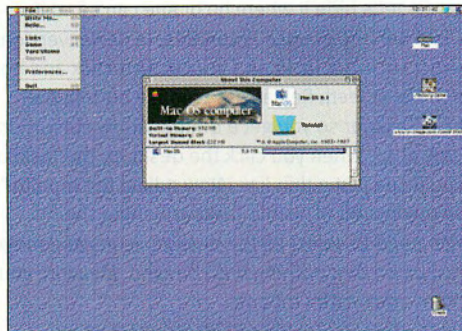
Nothing hits home like buying @Home at \$48 a share.

Mac OS PC

Make your friend's Windows PC look and act like a Mac (temporarily, at least).

 Open Internet Explorer on your buddy's Windows PC. Enter the URL www.yaromat.com/macOS8 into the address field, then drag the address icon to the folder C:\Windows\Start Menu\Programs. When your friend next starts up the PC, this lovely little multimedia site will pretend to delete the Windows installation and replace it with a functioning Mac OS 8 desktop.

THE FIX: Click any of the icons in the menu bar, so your despairing pal can get his poor lil' Windoze peecce back.



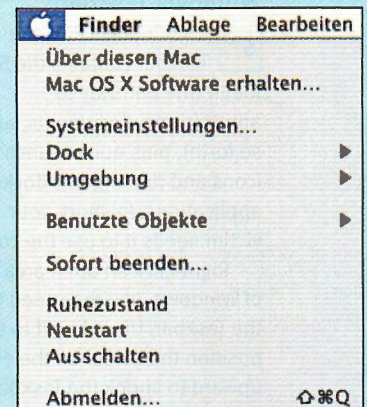
It may look like a Mac, but it's just a Web site.

Working in Tongues

Monkey around with OS X's International preferences to give a system that certain *je ne sais quoi*.

X It's *très élégant* to speak in exotic languages, so why not modify a friend's computer to display menus, dialogs, and even applications in a foreign tongue? Open OS X's System Preferences on the Mac and click the International icon. Click Edit to choose from the more exotic languages, and click the check box of one that appeals to you. Press OK, then drag the new language to the top of the Languages list. In the lower portion of the dialog box, choose a text behavior that matches the language—for example, the Norwegian behavior goes with the Norsk language. Restart the system, and it's *ett, to, tre*—"What international man of mystery has been monkeying with my system?"

THE FIX: Drag English to the top of the list and *Neustart*—er, Restart.



I don't know about you, but the concept of *Bearbeiten* strikes us as a bit, well, scary.



Foe

Reserve these gems for people you seriously want to tick off—that's what they'll do.

Fresh Porn in the Morn'

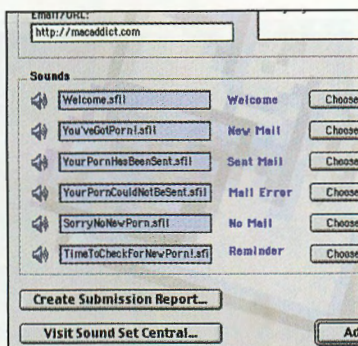
Embarrass your foe by making coworkers think he's a porn addict.

9 This evil escapade requires three freeware and shareware applications to make your victim's Microsoft Outlook Express or Entourage application speak porn-delivery alerts in a Mac Speech voice (unless you want to record your own voice—no, we didn't think so). Your target must have Text to Speech and the rest of Apple's Speech software installed.

First, use SimpleText to create a new text file; type the words "You've got porn!" and save the file as Speech.txt. Start up QuickSpeech (on the Disc), drag the Speech.txt file into the QuickSpeech folder (replacing the existing one), and select Convert Now from the File menu. That will create a QuickTime file called Speech.mov. Using SoundApp (on the Disc), select Export From QuickTime in the File menu, then navigate to and select the Speech.mov file, then click Export. In the subsequent dialog box, choose Sound to be System 7 Sound—in the Export drop-down menu—this creates a sound file you can use as an system alert. Repeat this process to create six sound files, all focusing on your victim's painful porn addiction.

Now open Expression (also on the Disc). For each Outlook Express or Entourage mail event, select your customized sounds, then choose Save Sound Set from the File menu; save it as Default Sound Set (to camouflage it). This creates one single-file sound set. Copy this file to the Sound Sets folder inside the victim's Outlook Express folder (or the Entourage First Run folder) and delete Microsoft Sound Set. Open Preferences from the Edit menu and choose Notification; select Default Sound Set from the drop-down menu. Turn up the volume on your mark's Mac—and scurry on out of there.


THE FIX: Delete Default Sound Set (Outlook Express will regenerate the normal sounds).



You've got what?

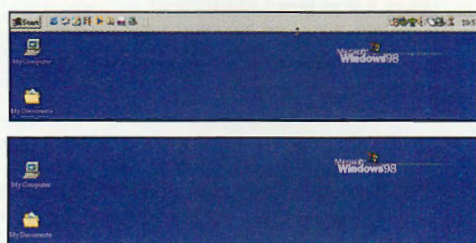
Tsk, Tsk, Taskbar

This prank hides the Windows Taskbar

 On Windows PCs, the Taskbar contains the Start menu (the pathway to applications, documents, and so forth), plus quick-launch icons and running-but-docked applications. In short, your victim needs it to use the computer. So let's hide it where he or she can't find it.

Right-click an open area of the Taskbar and choose Properties. In newer versions of Windows, you may need to deselect Lock The Taskbar. Click OK. Left-click and hold the Taskbar, then drag it to the top of the screen. Release the mouse button, then position the cursor on the edge of the Taskbar so you get a double-arrow cursor; drag upward to shrink the Taskbar to a tiny strip. When you click the desktop, the Taskbar should become nearly invisible—you'll see just a thin line. Now adjust the monitor's vertical size and orientation to hide the last bit of visible Taskbar behind the monitor's plastic bezel. You may also need to select all the desktop icons and move them down slightly to maintain the illusion that nothing has changed. Measure your victory in terms of the number of times your victim reboots.


THE FIX: Readjust the monitor settings, drag the Taskbar to its proper size and position, and reset the Taskbar options.



Now you see it, now you don't. Using Windows without a Taskbar is like riding a two-wheeled tricycle.

Maddening Macros

This Word Macro trick makes words appear—where they don't belong.

9  First make a copy of Microsoft Word's Normal template (you'll find it in the Templates folder in your main Office folder) and hide it where it won't be found—say, in a ColorSync folder. After it's safely stashed away—you'll need the template later to reverse this prank—start up Word, open a new document, and choose Tools > Macro > Record New Macros. Enter a name—say, ImportantMacro—and make sure the option Store Macro In All Documents (Normal) is selected. Then click the Assign Macro To Keyboard button. A Customize Keyboard dialog box pops up; enter Command-S (Control-S in Windows) and click Assign. A tiny macro-recording controller then appears.

Type your prank phrase into the new document you opened earlier—maybe something like this one: "This certified Microsoft application has evaluated your text entry and has judged it unworthy of committing to storage. Word will now delete it for your convenience. This operation will commence in 5 seconds; abort by pressing Command-S." Click the square stop button on the controller. Now, every time your victim presses Command-S, this text will appear in the document. Heh, heh, heh.

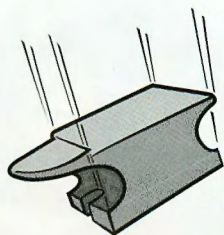
For still more enjoyment, create another macro, assigning it Command-C (your victim might try to copy and paste the work into another document). If you're feeling especially nasty, use the macro-recording controller to paste in the following text: "[Victim's name], I think I made it pretty clear I'm not going to accept your crap. Resistance is futile!"

You can record several macros to further torment your target, and assign them to other frequently used key combinations—Command-Z (Undo) would be especially aggravating, don't you think?



THE FIX: Replace the new Normal template with the one you stashed away for safekeeping, and all's well again.

Using Word Macros, you can frustrate unsuspecting foes.



Fired

If you execute these two tricks properly, you can torment your oppressors. Screw up, and you'll get the boot.

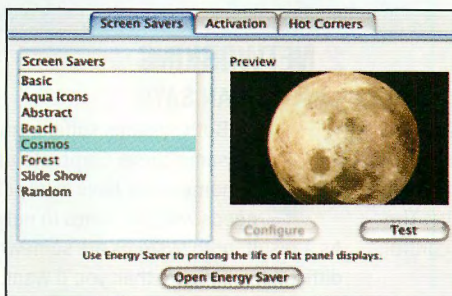
When Your Moon Hits His Eye

Give your boss a virtual mooning.

X First, take several pictures of your darling derriere with a digital camera—unless you're incredibly limber, use the camera's self-timer. Don't forget the classic "pressed ham" car-window shot. Resize your pics to the target computer's screen resolution (1,024 by 768 is safe if you don't know—it'll scale), and hide them on the company server in an innocuously named folder.

Next, gain access to your boss's computer. In Mac OS X, open System Preferences, then Screen Saver. Select Slide Show, then click the Configure button and locate the hinky-hiding folder on the server. Click the Test button and admire your work. If the system's fast enough, the image will automatically zoom in and out, giving him or her a extra-special full-moon view. (Also see "Make an OS X Slide-Show Screen Saver," p66.) Note: This prank will work in Windows 2000 or XP, too—just right-click the desktop and choose Properties, Screen Saver, My Pictures Slideshow, then click Settings for further instructions.

THE FIX: When you hear the boss holler "Whose ass is that?" quickly delete the images on the server—and it might be wise to wear loose-fitting pants for the next few days.



Your boss will be staring at an entirely different kind of moon after you enhance his or her screensaver.

A Few of My Favorite Words

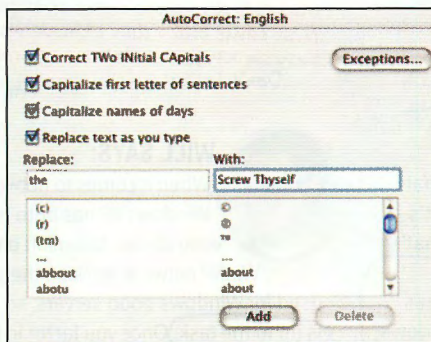
Office's AutoCorrect feature can make your enemies tell themselves to go screw themselves.

9 X Know an irritating someone who's enamored with faux business speak? One who casually throws out terms like "synergies," "deliverables," and "action items?" Here's how to deflate that blowhard—fast.

Open a Microsoft Office application on his or her computer—say, PowerPoint, 'cause Mr. or Ms. Know-It-All loves making pretentious presentations, right? Select AutoCorrect from the Tools menu, and check the Replace Text As You Type box. Enter your mark's favorite words and phrases on the left side of the box, and your suggested replacements on the right. For example, "team leader" might become "head marketing weasel," while you could replace "proactive dialogue" with "ass kissing." As your victim types, PowerPoint will automatically replace the jargon with your apt corrections.

We recommend also replacing common words—for example, replacing "the" with "Screw Thyself." This tip is efficient as well: Modify the AutoCorrect table in one Office app, and all the rest will pick up that correction.

THE FIX: Remove your suggested corrections from AutoCorrect—but wait until you see one in a presentation.



Value-added enhancements may be results driven, but the Screw Thyself market remains suboptimal on a going-forward basis.

10 Stealth Tactics

If you're not naturally sneaky and devious, here's some pointers on how to execute these tricks properly. To wit:

- Divide and conquer: One cohort distracts the mark while the other plays the prank.
- Dress appropriately: Do you really think plaid blends in?
- Check your watch: Most people work during the day. At their computers. Wait until they're gone.

- Aspire to anonymity: Don't sign your work. Don't leave fingerprints.
- Don't brag: Pranks aren't pranks until they've gone off.
- Poker face: Don't laugh out loud within earshot.
- Maintain innocence: "I didn't do it."
- Deflect blame: "Jones over there did it."
- Anticipate rebounds: "If Jones didn't do it, Smith must've."
- Plea bargain: If you get caught, beg for leniency.

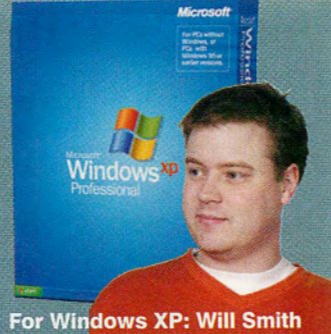
More Dirty Deeds

Don't stop with simply haunting your target's computer—really press your luck with a couple of these stunts:

- Advertise your victim's job on an online job-listing service. Put his or her name and email address as the contact.
- In Mac OS 9, put a shutdown script in the Startup Items folder and a startup script in the Shutdown Items folder.
- Using the Keyboard control panel in Mac OS 9, uncheck the U.S. box, then change the keyboard layout to Norwegian.
- Using the icon-replacement abilities of Get Info in Mac OS 9 or Show Info in Mac OS X, mix up the icons for applications and documents.
- Change the default Web-browser text and links color to white (uncheck Allow Page To Specify Colors).
- Depending on which political group most upsets your target, change the browser home page to www.democrats.org (Democrat), www.mc.org (Republican), or www.gpus.org (Green).
- In Mac OS 9, turn on AutoPlay in the CD Control Strip module, crank up the volume, insert a particularly obnoxious CD in the Mac, then choose Shut Down. The sound will AutoBlast when your mark boots up.
- Use the victim's email account to send get-rich-quick schemes to everyone in the address book.
- Put a piece of tape over the sensor on your mark's optical mouse.
- Use one of the many practical joke apps available on the Web—check out www.computerpranks.com, www.thefreesite.com/Seasonal_Freesies/April_Fools, or www.rjsoftware.com/software/entertainment.



Mac OS X versus Windows XP



For Mac OS X: Ian Sammis

For Windows XP: Will Smith

1 INTERFACE

IAN SAYS:

The Mac OS X interface has inherited much of the elegant, intuitive behavior of Mac OS Classic, while shedding many of that system's more irritating habits. The system is clean, polished, and easy to control.

WILL REBUTS:

The real problem with the OS X interface is that there aren't any Macs fast enough to run it with all the spiffy effects turned on.

Any?! What planet is HE from?

Rik, he has a point. OS X doesn't run well on lower-end machines. That should count against Apple.

Yeah, so your old SE/30 can't handle it—who cares?

But don't you think that it's important to consider people who haven't upgraded to faster machines. It's not fair to disregard their argument.

WILL SAYS:

Windows XP includes a somewhat cartoony new user interface that's designed for high resolutions. That's great, except that it looks clunky at resolutions below 1,280 by 1,024. It does sport many cool features like drop shadows, fading menus, and subpixel font resolution, all of which really up Windows' visual ante.

He got THAT right.

It really sounds like Microsoft is getting its act together in terms of interface. Should it get points for that?

Points for ripping off the Mac OS again? Not on my watch. And drop shadows? Be still, my beating heart.

IAN REBUTS:

XP tries, but there's simply no way it can outclass Aqua when it comes to golly-gosh-gee-whiz graphical trickery.

I don't know. Sounds like a close call.

Have you used XP? It looks like it was designed by a Disney intern on acid!

But in journalism school, they taught us it was important to be objective.

Objectivity, smobjectivity—OS X wins hands-down.

WINNER: MAC OS X

2 NETWORKING

IAN SAYS:

Both systems suffer from the same curse: Corporate users and home users have wildly different needs when it comes to networking. As a result, both systems are somewhat more difficult to configure than you'd want. (Granted, Mac OS X doesn't take things quite as far as XP does—XP is infamous for throttling downloads by default to preserve bandwidth for your coworkers, even on home machines.)

WILL REBUTS:

Oh, come on! A fix for the network throttling "feature" was available on the Net moments after the "feature" was discovered.

Mac OS X had its share of bugs when it first came out. I don't think we should punish XP for a mistake Microsoft fixed.

Don't let Microsoft off the hook!

WILL SAYS:

When it comes to networking, Windows XP has both power and ease of use. Microsoft based the

WinXP network stack on the same one used for Windows 2000 servers, so its pedigree is up to the task. Once you factor in the ease with which even the most bumbling rube can connect to a network, then Windows XP is the clear choice for a networked individual.

Of crashing?

IAN REBUTS:

While I'll concede that XP has an outstanding networking stack, apparently Jobs isn't the only guy with Kool-Aid available for the drinking. Mac OS X sports the BSD interface and is also a snap for newbies to configure and use. Calling XP the "clear choice" is going a bit far.

It seems too close to call. Is it a tie?

A TIE? OS X's networking kicks XP's skinny ass!

But in journalism school we learned one of the five pillars of journalism is truth in reporting.

And the sixth pillar is smelling bull crap—and XP has a mighty aroma of it. OS X wins again!

WINNER: MAC OS X

3 NAVIGATION AND EASE OF USE

IAN SAYS:

Mac OS X's Finder is a mixture of the Classic Mac OS Finder and OpenStep's File Manager. The result is a system that retains much of the classic Mac OS's ease of use, yet adds several power-user features like the column view. The System Preference panels represent a much-needed cleanup of the increasingly messy set of controls that had sprung up by Mac OS 9 (and under Windows, for that matter).

Column view IS cool.

Agreed. Not to mention that toolbars and the Dock are everything that dumb Start menu wants to be.

WILL REBUTS:

The column view in OS X rocks. We can't wait for the Windows development team to steal it for the next version of Windows.

I think we can give this one to Mac OS X. I appreciate Will's honesty and objectivity.

Uh, I think Will's trying to be sarcastic here...

WILL SAYS:

Despite having stolen most of the good ideas from Mac OS, Microsoft never really put those pieces together into a cohesive, easy-to-use OS. In Windows XP, the Start menu makes sense and is finally the one place where users can go to access every single thing on their computer. The centerpiece of the Start menu is the dynamically updated application list, which puts the most commonly used apps two clicks away from loading.

Right again, Will!

IAN REBUTS:

Congrats on discovering the miracle of Recent Applications—it really was a cool idea, back in 1997.

Ian's right. But should I tone down his sarcasm? It sounds kind of harsh.

Harsh? Try navigating through XP's folder structure—now THAT'S harsh. Chalk up another victory for OS X.

WINNER: MAC OS X

An Impartial Debate

Which is the better operating system, Mac OS X or Windows XP? Endless heated debates have been swirling around on the Internet and in various magazines (including our sister magazine, *Maximum PC*) about which next-generation operating system is the superior breed. (Gee, guess which one *Maximum PC* picked?) Well, it's time to settle the controversy fairly and squarely. And who better to handle that task than *MacAddict*?

To do so, we staged a Celebrity OS Deathmatch, pitting *MacAddict* contributing technical editor Ian Sammis against *Maximum PC* technical editor Will Smith (also known in *MacAddict*'s office as Little Ian). After each übergeek gave his educated opinion in each of six categories, editors Cathy Lu and Rik Myslewski chose the winning OS in surely the most unbiased head-to-head comparison of Mac OS X and Windows XP to date.

4 POWER

IAN SAYS:

This is where Mac OS X really shines. Thanks to its mixed heritage, Mac OS X can handle everything from MacProject (circa 1985) to Unix's Gimp graphics app without breaking a sweat. Because of the Unix core, enough free tools are available to satisfy the most power-mad geek—without resorting to kludges like Cygwin. Want the Apache Web server? Comes with. A C compiler? No problem. TeX? Grab and install.

What the hell is cygwin?

A clever—if gnarly—Unix environment for Windows. Thank Steve we don't have to use it.

WILL REBUTS:

Thousands of poorly documented *nix apps are now available for OS X. Yay. An XP user has a library of thousands of applications available, and we can play games newer than Oni!

Rik, he does have a point. We still get shafted when it comes to games.

Yeah, like you WANT to play Skydive or Daikatana!

WILL SAYS:

While Mac OS X finally supports dual processors—in one or two apps—and just recently added preemptive multitasking, Windows has had these features for five years. Add in support for nearly every piece of hardware made in the past five years—and a software compatibility mode that will run the most finicky legacy software—and you can't deny Windows XP's power rating.

IAN REBUTS:

Mac OS X supports dual processors in any application that uses threads. That'd be basically all of them. While having drivers is certainly nice, I'm not sure that it qualifies as *power*. Power is the ability to rewrite parts of the kernel for specific tasks—without getting sued into the ground by Microsoft.

I think Windows may have OS X beat.

Who cares? Let's go with OS X again. But wouldn't that be unethical?

Unethical? That's Microsoft's middle name. Whose side are you on, anyway?

WINNER: MAC OS X

5 CUSTOMIZABILITY

IAN SAYS:

Mac OS X is already rife with tweaks, tricks, and downright skanky hacks. From shareware apps that offer old behaviors like Windowshade X to complete replacements of the windowing system with X-windows, it's hard to beat Mac OS X when it comes to customizability.

Actually, Mac OS X isn't as customizable as Mac OS 9. Should I have Ian point that out to be fair?

Fair?! We're comparing OS X with a MICROSOFT OS—what does FAIRNESS have to do with it?

WILL REBUTS:

I'll take the ability to tweak my hardware over the ability to tweak my interface any day. Of course, that's more of a shortcoming of the Mac platform than an OS X problem.

Will makes a good point. But we're just comparing OSs.

Will's weak.

WILL SAYS:

Windows XP allows an unprecedented level of customization for a Microsoft OS.

You can change the colors of your Start menu and Taskbar. Although we initially thought Windows XP would be the first version of Windows to offer a fully skinnable user interface, à la WinAmp, Wintel users are still holding their breath. We expect to see user hacks that enable Windows XP skinning by mid-2002, though.

Soooooooooo exciting!!

IAN REBUTS:

Color me unimpressed—enthusiasts were skinning Mac OS X before the system even emerged from its public beta. Get better geeks.

Wow, I never knew how mean Ian can get. I think Windows may have caught up to the Mac OS on the customization front. What do you think?

No matter how much you polish a piece of crap, the best you can get is a shiny piece of crap. OS X wins again!

WINNER: MAC OS X

6 INTERFACE NAME: AQUA (OS X) VERSUS LUNA (XP)

IAN SAYS:

Aqua is the clear winner, of course—wet, wild, and far less frightening when followed with the ending *tic*.

WILL REBUTS:

Is "Aquatic" a word?

He must know that aquatic is a word. Maybe he was tired. Should I ask him for a new rebuttal?

You snooze, you lose.

WILL SAYS:

Aqua. Luna. Luna. Aqua. Which is a better name? I say Aqua.

Aqua means water. Water gives life—to plants, animals, everything! Every day of my life, I drink water, and it is good. When was the last time the moon did something for me?

IAN REBUTS:

Well, it gave us a calendar, without which we wouldn't have monthly deadlines—never mind.

Oh my God, I think they've switched brains on us.

Couldn't have—Ian's massive thinking machine couldn't fit in a Windows lover's cranium.

WINNER: MAC OS X

FINAL

MAC OS X **6**
WINDOWS XP **0**

Mac OS X wins by a landslide!

reviews

Better living through smart shopping.

Canvas 8

design & graphics

Company: Deneba

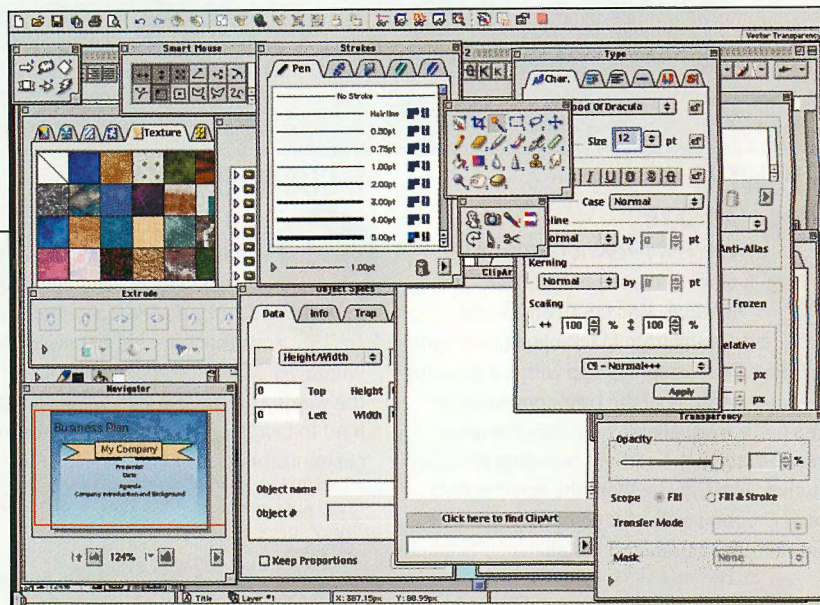
Contact: 305-596-5644, www.deneba.com

Price: \$399 (SRP), \$349 for electronic distribution with no fonts

Requirements: Power Mac (G3 or better recommended), Mac OS 9.0.4 or later, 64MB RAM (128MB for OS X)

Eventually, all the graphics applications creative professionals have come to rely on—from companies like Adobe, Quark, and Macromedia—will come to Mac OS X. No one is sure when, but it'll happen. Someday. In the meantime, Canvas can help you get some work done in OS X today—and you'll be surprised at just how much you can do with this well-integrated suite of graphic tools.

Canvas began its life as a sort of successor to Aldus SuperPaint, combining drawing and painting tools into a single application. When Photoshop began to emerge as the painting powerhouse, Canvas began to focus more and more on drawing, while still keeping a spotlight on the intersection between the two functions.



Be thankful for the palette docking bar—Canvas uses a lot of palettes.

Somewhere along the way Canvas picked up 2D-animation capabilities, page-layout commands, and even some very basic 3D tools. The result is an application that does a little bit of everything right out of the box.

Canvas's strength lies not so much in its individual tools as in how they interact. The SpriteEffects palette, for instance, will look very familiar to Photoshop users, as it replicates nearly all the standard Adobe plug-ins. The SpriteEffect technology, however, allows you to apply the filters to vector objects as well as raster images, and the objects remain fully editable. Canvas also includes a unique Lens feature, which allows SpriteEffects to pass through a transparent object and affect underlying objects—this makes it dead simple to apply and edit effects in a specific shape and location on your document. You can even use Photoshop-compliant plug-ins as SpriteEffects, but only under Mac OS 9.x

(presumably until OS X-native Photoshop plug-ins arrive). You'll want to use SpriteEffects judiciously, as Canvas recalculates them every time you move, resize, reshape, or otherwise transform an object, so a project can bog down if you apply too many effects too early on.

While SpriteEffects are powerful tools in the hands of a seasoned artist, Deneba tries to make Canvas accessible to beginners as well. To this end the program bundles a number of templates, all of which you can preview quickly and easily in the New Document dialog box. It also includes a unique EasyShapes palette, which gives you quick and precise control over some common shapes like arrows. The package also includes a whopping four CDs' worth of clip art, fonts, and extras, all detailed in a printed catalog written in five different languages. (The downloadable distribution doesn't include fonts, though, and Deneba



Find a demo of Canvas 8 on the Disc.



FREAKIN' AWESOME!
The most valuable products, the coolest gizmos.



SPIFFY
A solid offering. Overall a good investment.



YEAH, WHATEVER
Neither recommended nor rejected. Some might like this, but we weren't impressed.



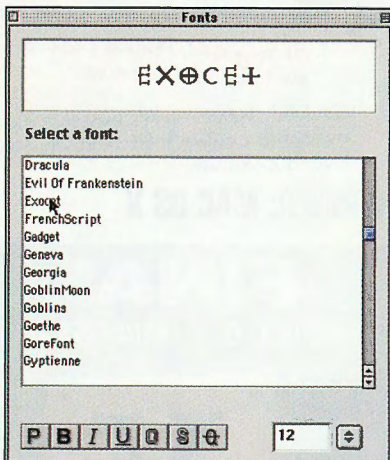
BLEEH!
Give us back the time we spent testing this.



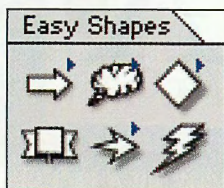
Compatible with Mac OS X or later.



Compatible with Mac OS 9.x or earlier.



Canvas's Type palette makes picking the right font a breeze.



The EasyShapes palette streamlines your use of simple shapes.

Internet (In)Direct

Groupware and collaborative tools have become popular buzzwords lately. In a nutshell, they mean using the Internet to share files quickly and easily with your coworkers. While some companies' approach is to use a separate service, Deneba integrates these options directly into Canvas—theoretically, anyway.

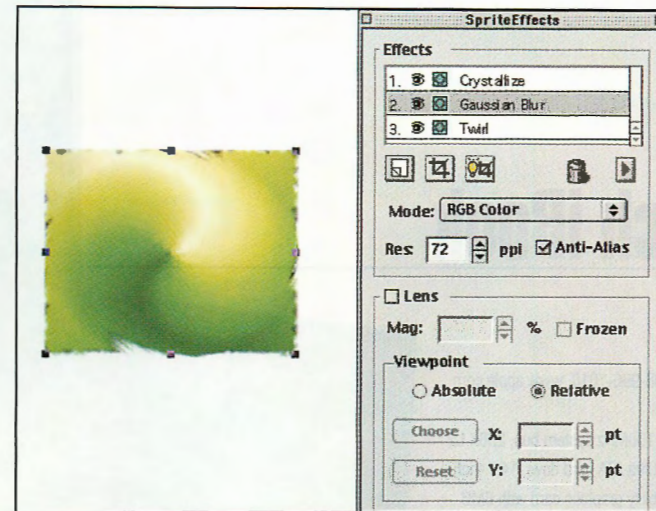
Deneba's documentation mentions an Internet button in Open and Save dialog boxes that allows you to access files stored on remote servers via FTP or HTTP. It also mentions a service called DenebaShare, which lets you store files on the Internet for coworkers to retrieve. We couldn't find an Internet button anywhere, and nothing in the documentation suggested why we'd have this problem. As for DenebaShare, Deneba's Web site admitted the service wasn't ready at press time. It should be up and running by the time you read this; check the site for more details.

didn't tell us how much clip art it includes, if any.)

These features alone would make Canvas 8 a worthy competitor to Illustrator and FreeHand, if for no reason other than price. But the program doesn't stop there. While drawing is its primary focus, Canvas also includes a full suite of painting tools. Though it tucks these away under the Paint Object Creator icon on the tool palette, you can break out a stand-alone palette. The interface may be slightly different from what you're accustomed to in other programs, but the documentation covers all of this extensively. Work through the tutorials, and you should be up and running inside of a day.

Canvas's new HTML-export options are particularly impressive. The application can use either Cascading Style Sheets or tables to preserve the page layout, and automatically includes navigational aids (forward and back links) between pages in a given site. Images created within Canvas are automatically saved in the most appropriate format (GIF for bitmaps and JPEG for photo- or vector-art); adding Web-ready JPEGs or animated GIFs created in other programs is point-and-click easy. Canvas also offers image-slicing tools, and new palettes streamline common Web tricks such as adding hyperlinks to text or images, and converting graphics into rollover buttons. You can even save animations generated within Canvas as either animated GIFs or Flash SWF files. About the only thing it *doesn't* do is write behavioral JavaScript actions à la Dreamweaver.

While Canvas's interface isn't exactly standard, Deneba has thoughtfully included a battery of customization controls. You can rearrange the menu commands to your liking and assign keyboard shortcuts to almost any task. Canvas sports a truly remarkable number of palettes, and to help you manage these,



The SpriteEffects feature allows you to apply any number of filters to a given vector object. Just don't overdo it.

the top region of each document contains a docking bar where you can stow them for easy access. Canvas also includes an impressive range of automation tools for remembering frequently used procedures and batch-processing multiple files. In addition to offering complete AppleScript awareness, Canvas includes a Sequence palette, similar to Adobe's Actions palette; it records a sequence of operations and allows you to save them as a macro so you can easily replicate effects or re-create objects.

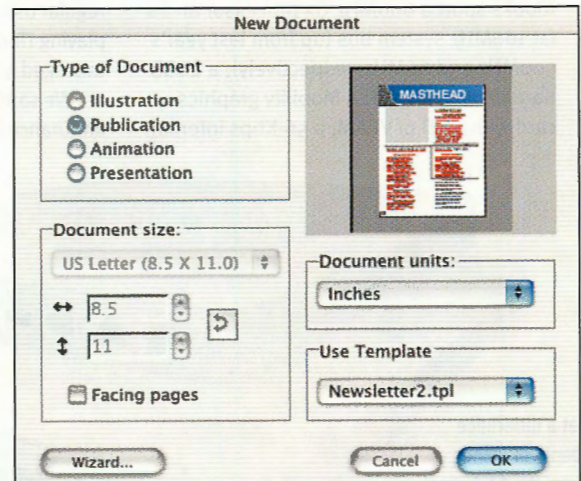
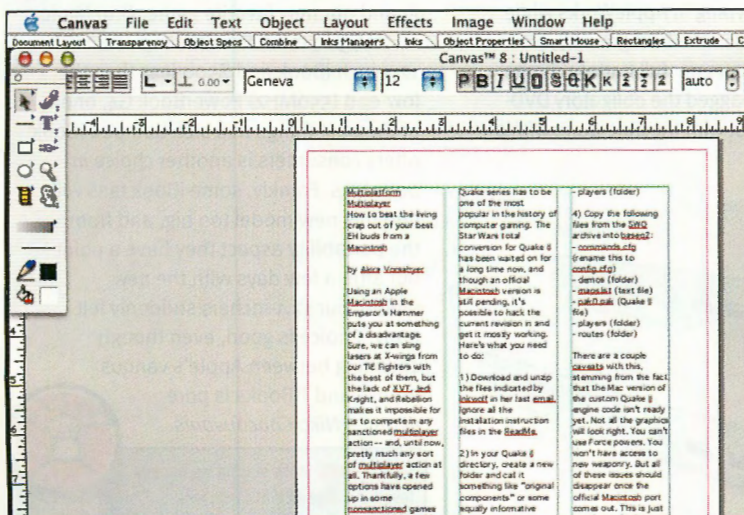
Canvas's other options aren't always as easy to grasp. Canvas really tries to be all things to all (graphics) people, including options for page layout, presentations, and animations (in case you can't afford InDesign, PowerPoint, and Flash). However, these options tend to be a bit quirkier and more demanding in Canvas than in the dedicated applications. Placing text, for instance, requires a very precise sequence of not altogether intuitive steps; one misstep and the text just doesn't appear. Animation documents lack any sort of timeline controls,

relying solely on a technique known as *onion skinning* (showing the previous and next frames at any given moment in the animation). Still, Canvas is one of the first major applications to include many of these features in an OS X-native tool.

Canvas isn't perfect. While many Photoshop plug-ins work flawlessly (but only in Mac OS 9.x), others require specific Photoshop features and balk with an "unknown error" message. The learning curve is also pretty tough for some of the more advanced tools and features, especially the page-layout functions. Still, the sheer magnitude of tools and their interactions make Canvas an amazing value—if only because it brings all of these capabilities to OS X today, instead of "later this year."

—Rich Pizor

good news: Brings tons of graphics tools to OS X. Integrated Internet file sharing. **bad news:** Unique interface can be confusing. Learning curve difficult for some features.



Previewing templates in Canvas's New Document dialog box makes it easy to get your project off on the right foot.

For those of you who can't afford InDesign, Canvas 8 brings page-layout tools to OS X.

14.1-Inch iBook

hardware



Company: Apple

Contact: 800-795-1000 or 408-996-1010, www.apple.com

Price: \$1,799 (SRP)

Specifications: 600MHz G3, 100MHz system bus, 256K L2 cache, 256MB SDRAM, 20GB Ultra ATA hard drive, 14.1-inch TFT XGA display, Rage 128 Mobility graphics card with 8MB VRAM, DVD-ROM/CD-RW Combo Drive, 10/100Base-T Ethernet, 56-Kbps internal modem, 5.99-pound weight



Who you calling *Son of Pismo*? You may recognize the iBook's 14.1-inch display from last year's top-end PowerBook G3 (aka Pismo).

PHOTOGRAPH BY W. B. JONES

While using them daily in the *MacAddict* editorial coral, we've grown mighty fond of Apple's sleek white iBooks since their introduction last year (*Reviews*, Sep/01, p46). With the new 14.1-inch iBook, Apple has given us more to love—and yet another choice in affordable portables.

This iBook is the solution for folks who just want a great portable—not necessarily an ultraportable 12.1-inch iBook, nor a supercomputer-to-go PowerBook G4. The 14.1-inch's top resolution—1,024 by 768—isn't any higher than that of the smaller iBooks, but those 2 extra inches make this iBook especially attractive to bad-eyed old geezers like us.

Behind that pretty 14.1-inch face, this iBook isn't significantly different from the top-end 12.1-inch model (which *is* significantly faster than the one we reviewed in September). Both high-end iBooks sport a 600MHz G3 processor and a fat 100MHz system bus (up from last year's 500MHz and 66MHz, respectively); a 20GB hard drive; a Rage 128 Mobility graphics card with 8MB of VRAM; a 56-Kbps internal

modem; 10/100Base-T Ethernet; AirPort readiness; mirrored video out; AV out for composite video to a TV or projector; two USB ports; one FireWire port; a built-in mic; and a standard 1/8-inch audio out (audio in is still absent). Besides the jumbotronic screen, the only difference is the inclusion of an extra 128MB of RAM in the 14.1-inch's upgrade slot: a nice thought, but it's a mixed blessing. All iBooks have 128MB built into the motherboard and exactly one upgrade slot, so going bigger than 256MB requires that you replace the included 128MB chip. Of course, if you *need* more than 256MB, you might want more than an iBook.

That extra 2 inches also provides room for a bigger battery, which Apple claims will power the iBook for up to 6 hours. We all know what *up to* means, right? It's a very optimistic claim: You might hit 6 hours if you leave the iBook asleep the whole time. In regular use (typing in AppleWorks while playing iTunes in the background), we averaged 4 hours per full battery charge.

We sandbagged the obligatory DVD-endurance test with the epic *Gone with the*

Wind—running time 3 hours and 53 minutes. The battery lasted just over 3 hours. To put this into perspective, most portables have trouble lasting through a 2-hour show, so this is more than acceptable (and more *Gone with the Wind* than a normal human can bear). All we know is, the Civil War never looked as good as it does on that luscious 14.1-inch LCD TFT display.

Spectacular as the hardware is, we should also give credit to the fairly major milestone the 14-inch iBook represents—along with the new iMac, it's the first Mac to ship with Mac OS X as the default OS. The 600MHz G3 is essentially the bottom end of Apple's stable, but with the 100MHz system bus (up from 66MHz), this machine runs OS X plenty fast—just not *blazing* fast. And speaking of software, this book ships with all you need, including three of Apple's iApps (iPhoto, iTunes 2, and iMovie 2), as well as AppleWorks 6.2, World Book for OS X, and our new favorite game, Otto Matic.

At \$300 more than the top-end 12.1-inch iBook and \$500 less than the low-end (550MHz) PowerBook G4, one of the best things this size-bumped iBook offers consumers is another choice in portables. Frankly, some iBook fans will find this new model too big, and from the portability aspect they have a point—but after a few days with the new model, our 12.1-inchers suddenly felt puny. Choice is good, even though choosing between Apple's various iBooks and TiBooks is pure agony.—Niko Coucouvanis



What a difference a couple of inches makes: the 14.1 iBook looks fairly gargantuan next to its 12.1-inch little bro.

good news: More of what we already loved. Another kick-ass notebook option. **bad news:** It's not a G4.



Final Cut Pro 3

multimedia

Company: Apple

Contact: 800-795-1000 or 408-996-1010, www.apple.com

Price: \$999 (SRP), \$249 upgrade

Requirements: 350MHz G3 (not beige), 256MB RAM,

6GB AV hard drive, Mac OS 9.2.2 or Mac OS 10.1.1

Recommended: Dual-processor G4, large-screen monitor, high-performance SCSI media drives, qualified digital-video camera with FireWire I/O, qualified analog-video board

Final Cut Pro is on a roll. The nonlinear editing (NLE) app, a prestigious hit for Apple, has quietly revolutionized video-editing practice. Directors and editors are so taken with the possibilities of portable editing that it's hard these days to find a filmmaker who doesn't tote a TiBook with a copy of FCP.

FCP 3 is an innovative upgrade that shows Apple has been listening to its professional customers. It addresses the two biggest limitations of low-cost digital editing: offline effects rendering and storage capacity. Also new are a suite of high-level color-correction tools (see "Street-Legal Color," below), a voice-over tool for adding narration, Mac OS X support, and dozens of other useful features.

Up to now, FCP couldn't render common transitions (cross-dissolves, wipes, and so on), motion effects (scaling and cropping), or still-frame graphics (titles and imported images) in real time. You had to set up the effect and twiddle your thumbs while it

Street-Legal Color

If your project is destined for video broadcast or playback, you'll want to keep the color and brightness within what's known as broadcast-legal parameters—unless you want bleeding, distorted colors. Color correction has always been a weak area of FCP, but no more. The new, very professional color-correction tools include an excellent three-way color-correction filter, which is also one of the new G4 real-time effects. You can use a standard color picker to autocorrect black, white, and midrange colors. A Range Check filter zebra-stripes any colors that aren't broadcast legal.

rendered offline—and you had to go through that process dozens of times in a complex project. The other option was shelling out significant cash for real-time video hardware, such as Matrox's RTMac card—hardware that fit only in a desktop Power Mac.

Now your TiBook can do the job, too. When editing in DV or Apple's new OfflineRT video codec, all you need for real-time editing is a 500MHz G4. On our base-level G4/500 with 512MB of RAM, we found that FCP 3 could indeed handle single layers of supported transitions and motions in real time. Two layers worked occasionally; three layers never did. Apple says the number of possible simultaneous real-time effects depends primarily on your G4's speed, and that a dual-processor Mac has significant advantages over most single-processor machines. Keep in mind that real time is only for desktop previewing (which is where you'll make all the editing decisions); final encoding to DV or another codec is not real time, but you can take care of that once at the end of the project.

The other major performance and portability improvement in FCP 3 is OfflineRT. This highly compressed, PhotoJPEG-based codec can store more than 45 minutes of 320 by 240 video per gigabyte. That's right, you feature filmmakers can actually carry all the footage

for your movie on one hard disk and cut the whole thing offline. When the edit's done, FCP 3 can assemble the work in a final-quality online format, such as DV.

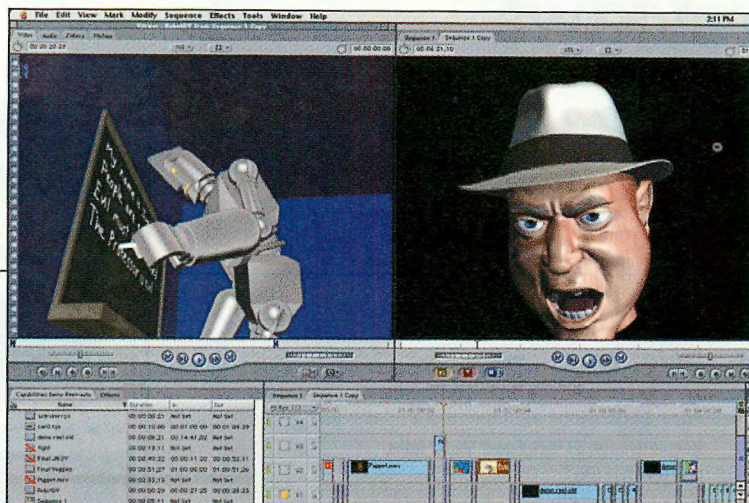
FCP 3 has not received a major makeover for OS X—and that's good, because moving to OS X won't exact a learning penalty. The Mac OS 9.2.2 and Mac OS X versions work and look almost exactly the same. We moved a project back and forth between the two without a problem. However, editors with a significant investment in third-party video hardware (such as the RTMac or Pinnacle's Cinewave) may need to wait on the release of new drivers and firmware before moving to OS X.

We liked the new voice-over tool, a blessing for documentarians and news editors. With it, you can record audio on the fly via any standard audio input, including a USB mic, as footage plays onscreen.

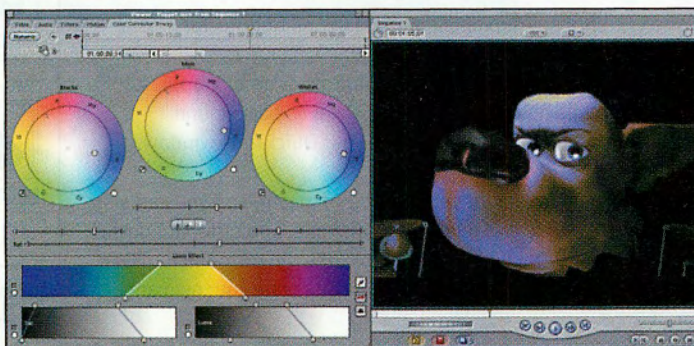
We use FCP daily and swear by it. We were impressed at the way Apple has thoughtfully and imaginatively enhanced an already superlative program.

—Steve Anzovin and Raf Anzovin

good news: Real-time effects with a G4 Mac. New OfflineRT video-storage format. Improved color-correction tools. Supports Mac OS X.
bad news: None.



Final Cut Pro 3 adds real-time G4 effects and superb color-correction tools to Apple's professional nonlinear video-editing solution.



The three-way color correction filter produces top-flight results; color modifications have controllable edge blending and falloff.

LiveSlideShow 2

multimedia



Company: Totally Hip Software

Contact: 604-685-6525, www.totallyhip.com

Price: \$49.95 (SRP)

Requirements: 333MHz Power Mac or faster, Mac OS 8.6 or later



Find the LiveSlideShow 2 demo on the Disc.

OK, you've sprung for a new digital camera and are taking some pictures. Who are we kidding...a *boatload* of pictures. Some of them are even good—now how do you share 'em? Enter LiveSlideShow 2, a \$50 utility that lets you arrange your favorite pics into digital slide shows, complete with slick transitions, background music, voice commentary, and custom navigation buttons. When you're done, LiveSlideShow exports all of these elements into a single QuickTime movie file that any Mac or PC sporting QuickTime 5 can play.

LiveSlideShow 2 takes about 10 minutes to learn—no manual required. In fact, if you've ever used iMovie, you'll feel right at home in LSS. You import still pics and sound files into a media Shelf window, drag them to a simple Timeline in the order you want them to play, and then preview your show in the Layout window. You can define how long each slide should stay onscreen, and adding text captions (even scrolling ones), transitions (choose from 10

customizable ones), and sound to each slide is straightforward. With version 2, you can also add a background soundtrack to your slide show and generate HTML code for publishing shows to the Web.

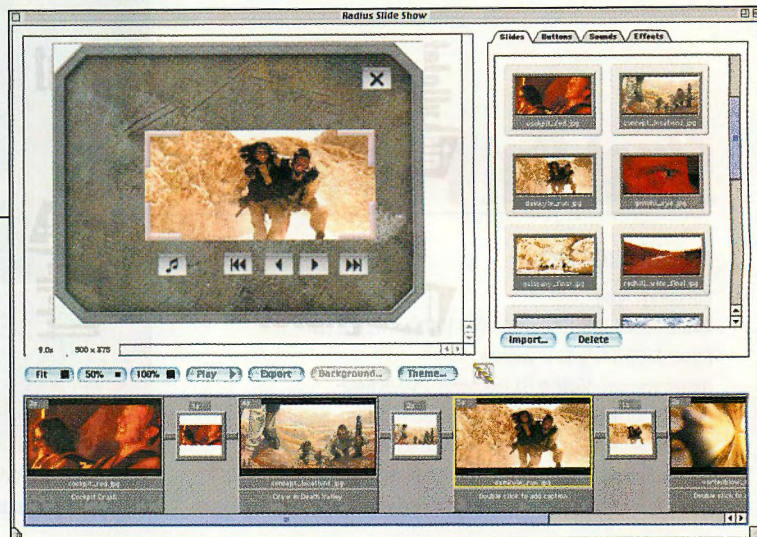
One of LiveSlideShow's strengths is that it renders each slide only once and relies on QuickTime's real-time transitions, instead of ones that you have to pre-render into the movie. Thus, the final QT movie takes up a lot less space. Not all programs handle things this way, but it makes a difference if you're sending your shows over the Internet. For example, a slide show created in Final Cut Pro hogged 1.7 megs; the same show made in LSS needed only 338K.

A couple of quibbles: You can add captions to single slides, but you can't create repeating text, like a heading for your show, on *every* slide. (You can work around this by

creating a custom background in a separate art program). Also, adding background music that plays throughout an entire show is cool, but the option to fade out the music at the end would be nice. Finally, creating shows with tons of slides can get organizationally overwhelming—we wish we could group slides into folders and see more slides on the timeline—it fills up quickly.

Nitpicks aside, LiveSlideShow is designed to add some welcome sex appeal to your plain old photos, and for that, it's easily the best game in town.

—Helmut Kobler



Drag-and-drop your way to awesome presentations via LiveSlideShow's media Shelf (upper right), Timeline (bottom), and main Layout area.

good news: Does almost everything you'd want. Great price. QuickTime skins rock. **bad news:** Weak organizational tools. Can't place reoccurring titles on slides.



Customize Your QuickTime Player

After tweaking your slide show to perfection, it's shameful to present it in a plain ol' boring QuickTime window—like some dime-a-dozen movie trailer. LiveSlideShow 2's new Theme feature saves your artistry from such degradation, letting you transform that QuickTime window into a custom interface that compliments your slides. A Theme consists of several elements:

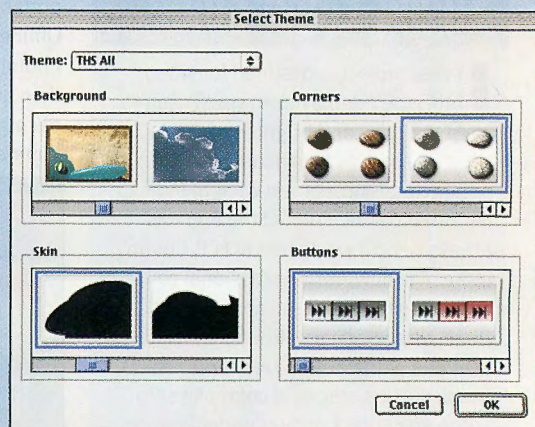
Buttons You can choose from over 50 predefined buttons for controlling your slides' playback.

Backgrounds Go with solids, gradations, photos, or other graphics.

Picture Corners These hold your slides in place on a background.

Skins These control the look and shape of your QuickTime window.

LSS offers plenty of elements for you to mix and match, and you can also download new themes (such as Halloween, Christmas, and other holidays) from Totally Hip's Web site. Some of the Themes (like the cartoonish UFOs) are hokey, but with a little Photoshop work, you can create your own and then import them.



Mix and match dozens of pre-loaded backgrounds, corners, buttons, and skins—or create your own.

ProNitron 22800

hardware

Company: Formac

Contact: 510-528-9300, www.formac.com

Price: \$699 (SRP)

Requirements: Any Mac with a VGA port

My, what a big screen you have! The ProNitron 22800 is Formac's 22-inch diagonal CRT flat-screen monitor. With a crisp image, three USB ports, and a smart tilt-and-swivel base, the ProNitron gives you more bang for the buck than comparable 22-inch displays.

In fact, the ProNitron is cheaper than the same 2060U display Mitsubishi currently sells for \$845. The big, bright, beautiful, 22-inch display (with 20-inch viewable screen size) has a maximum resolution of 2,048 by 1,536 pixels, a 75Hz refresh rate, and a 0.24mm aperture grill. In other words, the ProNitron displays vivid color, great image

Why pay Mitsubishi for a Mitsubishi monitor, when you can pay Formac \$200 less for the same Mitsubishi monitor?

detail, and crisp text even at small sizes. You can adjust the display's color and brightness to your heart's content, and there are presets tailored specifically for displaying text and graphics. Plus, you get about two-dozen image-tweaking, sizing, and scaling options.

The monitor's two VGA ports are on the underside of the back casing, so accessing them is a little difficult. But once you've plugged in your 15-pin VGA cables (one is included), they are less obtrusive than the cables on most monitors.

The ProNitron sports four USB ports: One upstream port connects to your computer

and three downstream ports connect to your USB peripherals. The USB ports worked with our keyboard, mouse, and external flash drive. As with other non-Apple monitors, you can't plug a keyboard into a ProNitron's USB port and expect to use the keyboard's start-up button.

The ProNitron 22800 is a high-quality, no-nonsense flat screen monitor that's easy on the eyes—and the wallet.

—Narasu Rebbapragada

good news: Cheap. Great picture.
bad news: Hard-to-access ports.



PHOTOGRAPH BY W. B. JONES



Deep Space Explorer

infotainment

Company: Space.com Software

Contact: 800-252-5417 or 416-410-0259,

www.starrynight.com

Price: \$49.95 (SRP)

Requirements: Power Mac, Mac OS 8.6 or later, 32MB of RAM, 150MB of free hard disk space

Deep Space Explorer, Space.com Software's latest astronomy program, puts you on an intergalactic starship cruising the ether. It's a fascinating concept, and the visuals are great, but DSE's implementation of basic elements, such as Find (for searching out specific items) and Spaceship mode (where you attempt to navigate through the universe with lame spaceship controls), is poor. This, along with an inconsistent rendition of the universe, distracts from the fun and educational aspects of the program.

Deep Space Explorer would be your ticket to the universe, but like this black hole, it sucks.

DSE offers spectacular views of galaxies up to 700 million light-years from Earth. DSE will instantly catapult you to your chosen destination, or you can take the helm in manual Spaceship mode and control the ship's speed and direction yourself. As with a real spaceship, there are no brakes; stopping requires decelerating to a complete halt, so it's irritatingly easy to overshoot your destination. Unlike a real ship, you can't look anywhere but straight ahead without turning the whole ship.

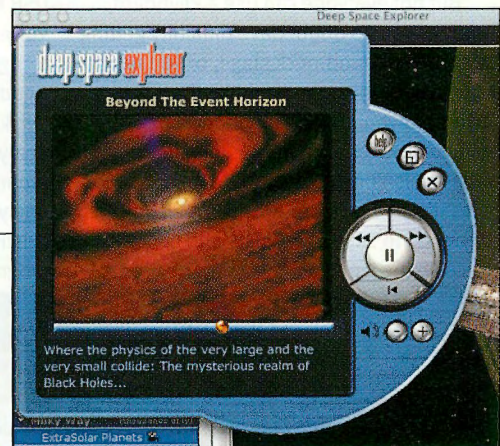
DSE's problems don't end there: Many known astral items don't exist in DSE's universe; ancillary QuickTime presentations

mention the Orion and Rosette Nebulas, but they aren't in the program's database.

Deep Space Explorer opens up the universe to inquiring minds of all ages, but the program's problems and inconsistencies make it tough to recommend. If Space.com Software fills in some gaps, DSE will be a truly fun and educational ride.

—Mark Shuchat-Marx

good news: Great concept. Spectacular visuals. **bad news:** Irritating spaceship-piloting controls. Inconsistencies between explanatory movies and fly-through space.



ViaVoice for Mac OS X Edition

productivity

Company: IBM

Contact: 800-772-2227, www.ibm.com

Price: \$171 (SRP), \$19.95 upgrade from ViaVoice for Mac Enhanced Edition

Requirements: G3 300MHz (native G3, not upgraded), Mac OS 10.1, 192MB RAM, 600MB free hard disk space, USB port

Captain's log: stardate 2002.04. We have entered a brave new world, a world where we can speak to our Macs and they will listen—sort of.

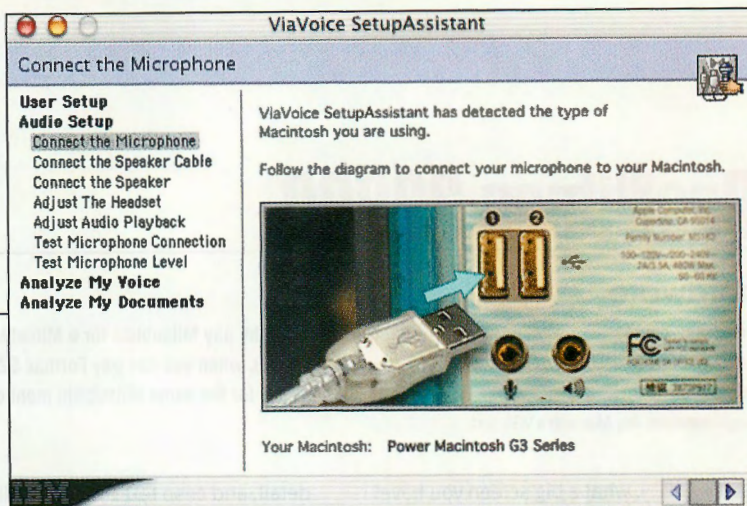
We still communicate with our Macs using a technology (the keyboard) first developed back in 1867, and although keyboards have advanced from mechanical to electronic, the basic QWERTY key layout, which dates back to the 1870s, is still present and accounted for.

But not everyone can use a keyboard. Many of you no doubt have difficulty getting past the hunt-and-peck stage, or you might have a wrist injury or disability that makes using a keyboard difficult or perhaps impossible. For such folks, a dictation program isn't just a neat thing to try on for size; it's an essential tool. IBM's ViaVoice is designed to save your wrists and let your voice do the typing.

On the surface, ViaVoice seems like manna from heaven. But configuring the program for the first time isn't easy, and its performance is hardly spectacular.

ViaVoice works in two ways. You can use its built-in word processor, SpeakPad, or talk directly into popular programs such as Microsoft Word, Entourage, and even an AOL Instant Message chat window.

Once you've installed the program, a lengthy Setup Assistant guides you through everything from hooking up the supplied USB headset microphone to creating your Voice Model by training ViaVoice to recognize and understand your voice. Good training is crucial to using ViaVoice; two key steps in the setup process are Analyze My Voice, which listens for pronunciation as you read a story, and Analyze My Documents, which scans your existing text documents for words not in the program's built-in 160,000-word dictionary.



Proper setup is the key to a happy relationship with ViaVoice. The Setup Assistant is very thorough, and even knows what most Macs look like.

Investing some quality time with the Setup Assistant is well worth the effort.

The watchword for ViaVoice is patience, lots of it. After you train the software, be prepared to endure long sessions during which the program will make a horrendous number of mistakes. For example, whenever our test subject, a 15-year-old male, spoke that famous song lyric, "And she's buying the stairway to heaven," ViaVoice thought he was saying, "And she's buying Astaire we haven't."

Getting around such problems is a two-way street: You have to adjust to ViaVoice as much as you have to train it to work with your speaking style. The most accurate technique is to speak slowly and clearly, enunciating each and every word as clearly as possible. Even if you're a budding actor, like the teenager we used as a guinea pig, you'll experience some frustration until you get your speaking rhythm just right.

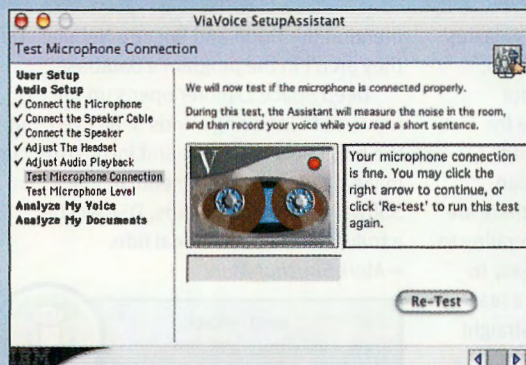
Worse still, once you and ViaVoice are making beautiful music together, it's no speed demon. Although it's optimized for a G4 and for multiprocessing, it lagged way behind the reader's voice when we set it up on a Dual-processor G4/800. Part of the training process is to speak in short phrases, pausing occasionally to give ViaVoice a chance to catch up.

Some day, voice-recognition systems will be smart enough to train themselves to accommodate you, rather than making you work the other way around. Until then, ViaVoice is definitely worth the pain and agony of making it work just right. You might even learn to like it. Computer—off!

—Gene Steinberg

Setup Upset

The first time we tried to set up ViaVoice, we used a Blue-and-White Power Mac G3/400 running Mac OS X 10.1.2. Alas, the experience was fraught with frustration—in the form of a kernel panic (Mac OS X's version of a full system freeze) when we tried to run a microphone test.



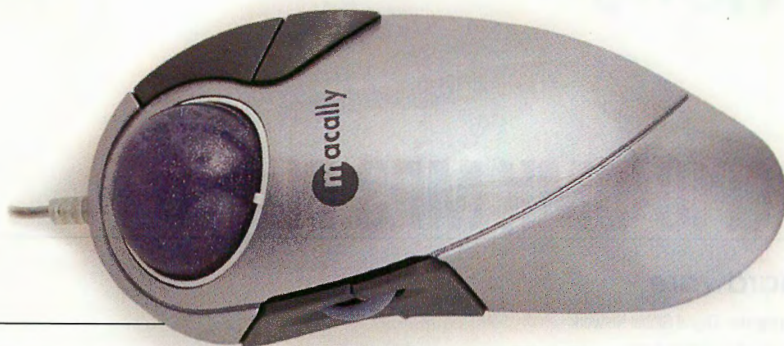
This simple microphone test caused a kernel panic on our first installation, but not after we reinstalled ViaVoice.

After enduring this system error twice in a row, we ran the ViaVoice Uninstaller and removed all of the program's user files. The second installation was a charm; we got through the entire setup process without any trouble. Our initial misfortune was most likely a fluke, but be warned.

good news: Clever Setup Assistant. Reasonably accurate voice recognition.
bad news: Buggy. Requires lengthy training. Somewhat slow performance.



Macally USB Optical Trackball



PHOTOGRAPH BY W. B. JONES

hardware

Company: Macally

Contact: 626-338-8787, www.macally.com

Price: \$59

Requirements: Power Mac, Mac OS 9.x or Mac OS 10.1 or later, USB port (native or upgraded)

Don't let the generic name of Macally's USB Optical Trackball fool you: It's actually a futuristic-looking device with a patent-pending Glitter Ball.

The device is shaped like...well, we're not quite sure what it's shaped like, but it fits nicely under the palm of your right hand (sorry, lefties). It's got five buttons, including the clickable scroll wheel; despite the trackball's ergonomic look, we couldn't get comfortable with it immediately. You work

Macally's USB Optical Trackball sports an interesting shape and a glowing ball—and that's about it.

the ball with your index and middle fingers while clicking buttons with your thumb, pinkie, and ring finger.

The five buttons are programmable using the included software. You can assign common clicking options, such as double-clicking and Control-clicking, and you can also use them to perform keystrokes, open folders and files, launch apps, or perform forward and backward navigation in your Web browser. You can also create application-specific configurations—a handy feature. Handier yet, OS X users can get an X-friendly beta version of the software at Macally's Web site.

The tracking is very smooth (because of the Glitter Ball, no doubt). The device does a

decent job for casual use, but it's still not ready for a game of Centipede—rolling the ball too fast confuses the optical sensor, rendering the cursor effectively dead on the screen for a moment.

The Optical Trackball is a capable device, but it isn't any more innovative than other products in its class. It is Mac OS X ready, which is a good thing, and if the low-slung trackball design appeals to your sense of ergonomics, it's worth a spin.

—Andrew Tokuda

good news: Inexpensive.

Good optical tracking.

bad news: Questionable ergonomics.

Not great optical tracking.



Waveburner Pro 2.0

audio

Company: Emagic

Contact: 530-477-1051, www.emagic.de

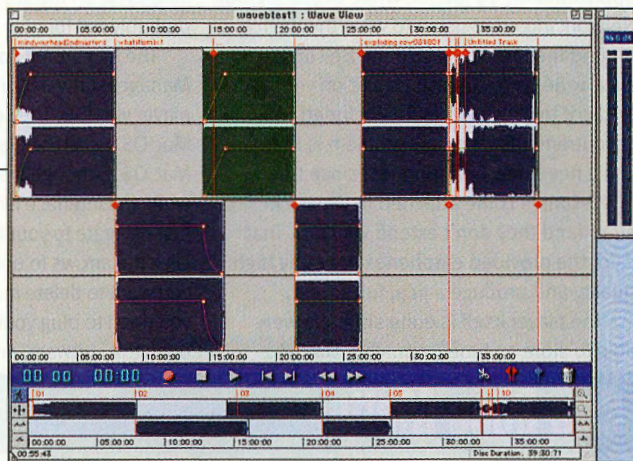
Price: \$299 (SRP), \$210 (street)

Requirements: 200MHz Power Mac 604e, Mac OS 8.6-9.x, 16MB RAM, 850MB free hard disk space, supported CD burner (see Emagic's Web site for a list)

Few applications offer full audio CD mastering and burning capability in a single package. One such package is Emagic's Waveburner Pro 2.0.

Burning a CD is easy—mastering its content is where you may need some help. Waveburner's Wave View window is a nondestructive graphic editor you can use to set fades, crossfades, track and index markers, pauses, volume levels and other basic settings for each track. In the Plug-in window, you can add audio effects (such as the included Multipressor or Limiter, or your own VST-compatible plug-ins) to individual tracks, to the overall mix, or both.

Waveburner Pro's Wave View window shows waveforms of your tracks and provides graphical tools for audio editing.



In testing, we performed fades and crossfades, applied numerous effects, and manipulated overall mix volume levels on song and sound files of all formats without a hitch. We also separated 60-minute mix files into individual tracks and—believe it or not—even recorded a soundtrack directly to Waveburner from an old cassette tape.

Waveburner failed us when we attempted to burn a plug-in-rich session straight to CD at 8X speed—the numerous real-time plug-ins were too much for our 450MHz G4. But we were impressed when, at 4X, Waveburner burned the session

flawlessly. Waveburner also offers Export As Disk Image options for burning complex sessions.

We'd love to see effects automation within tracks and more extensive crossfade edit capability, but overall, Waveburner Pro is the best combination CD-authoring app we've seen to date.—Andrew Freid

good news: VST plug-in support.

Graphic track and index marker editing is a breeze. **bad news:** Little effects automation. Limited editing options for fades and crossfades.



MPIO-DMK MP3 Player

9 hardware

Company: Digital Global Network

Contact: 619-283-1400, www.mpio.com

Price: \$209 (SRP)

Requirements: Power Mac, Mac OS 8.6-9.x, USB port

If we had a rating called *Freakin' Spiffy*, that's exactly what we would give the MPIO-DMK, a near-perfect specimen of an MP3 player. Approximately the size and weight of a spring roll, this futuristic-looking, *Jetsons*-like device is so compact that it won't even inspire jokes about whether that's an MP3 player in your pocket or...well, you know the rest. Other than a few minor drawbacks, the MPIO-DMK is the perfect MP3 player for people who want to hit the road without feeling weighed down.

Equipped with 128MB of internal memory (there's also a 64MB version available for \$179), the MPIO-DMK is about 3.5 inches long and 1 inch wide, and weighs approximately 29 grams. While Digital Global Network intended users to wear the device around their necks like Bonne Bell lip gloss circa 1986, you can also wear it on your arm or clip it to your belt via the included accoutrements. The only problem is that you'll need new headphones, since the MPIO-DMK's come attached to the neck strap (and they don't extend very far). That said, the provided earphones are fairly high quality and produce a rich, full sound.

The player itself is quite slick. We were able to store 30 tunes, equaling almost 2

hours of high-quality music (encoded between 128 and 160 Kbps); a single AAA battery kept the music playing all day long (over 8 hours). You can scroll through tracks via the jog dial on the side of the device, and the display shows information such as track number, song length, bit rate, and song title. An equalizer includes preset settings like Pop, Rock, and Classical.

Unfortunately, the MPIO-DMK does not include an AM/FM tuner or a digital voice recorder. If those features are not important to you, then we wholeheartedly recommend this player. If they are, well, we don't. Also, the 128MB of memory isn't upgradable. If you like to run marathons while plugged in or you want to listen to Richard Wagner's *Ring Cycle* on the go, the MPIO-DMK is probably not for you.

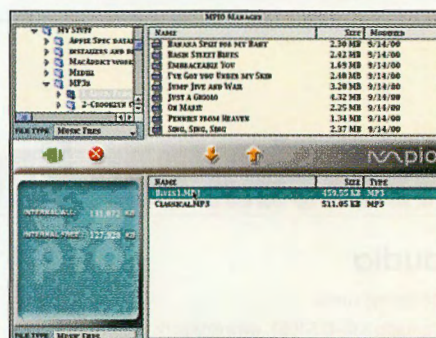
The MPIO-DMK comes with its own Manager software for uploading tunes to the player via USB. The software runs in both Mac OS 9 and the Classic environment in Mac OS X (though it's sometimes flaky), and while the interface isn't pretty, it's simple. Just navigate to your folder of music and click the arrows to upload music. Sadly, if you want to delete music or rearrange tracks, you need to plug your player into your Mac, open the software, and proceed from

there—you can't do any of those tasks via the player itself. Also unfortunate is the fact that the MPIO-DMK is not part of the iTunes 2 clique—Apple's digital-music app refuses to recognize the player's presence.

Despite a few minor shortcomings, the MPIO-DMK is one of the lightest, smallest, and coolest MP3 players we've ever had the pleasure of sweating and StairMastering with. It's absolutely worth buying if *little* is a big thing in your life.—Cathy Lu

good news: Supersmall. Superlight. Superportable.

bad news: No AM/FM tuner or digital voice recorder. No expansion slot.



The MPIO-DMK Manager software won't win any beauty pageants—but it gets the job done.

Size Does Matter

So just how big (or small) is the MPIO-DMK? We lined it up with several other items to give you an idea.



LIPSTICK



SPARK PLUG



BIC LIGHTER



CHEWING GUM



ASTHMA INHALER



ADHESIVE BANDAGE



SPRING ROLL



MPIO-DMK

3.5 inches

OBJECTS NOT SHOWN AT ACTUAL SIZE. DUH.

PHOTOGRAPH BY W. B. JONES

PHOTOS 1, 2, AND 7 COURTESY OF PHOTO OBJECTS

Piccolo USB Flash Drive

hardware

Company: Sonnet

Contact: 949-587-3500, www.sonnettech.com

Price: \$99.95

Requirements: Any USB-equipped Mac, Mac OS 8.6 or later

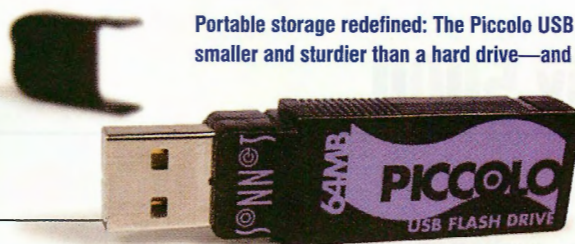
If you've been waiting for real-life technology to produce widgets as stealth as the gear used by James Bond and Maxwell Smart, Sonnet's Piccolo USB Flash drive is for you. It's capacious enough (64MB) to hold all your top-secret plans for world domination and compact enough (pictured life-size above) that you can stash it *anywhere* for the ultimate in covert convenience.

Piccolo is also functionally convenient: Plug it into a USB port, and the drive

mounts to the desktop—Mac OS's USB support does the rest (Mac OS 8.6 or later).

We didn't bother clocking the drive's claimed 700-Kbps performance because the Piccolo is about convenience, not speed. It's not about economy, either, offering only 64MB for \$100—outrageous compared to a FireFly drive (reviewed below), which packs five *gigabytes* (roughly 75 times Piccolo's capacity) for only twice the cost. But Piccolo uses solid-state Flash memory—and thus no moving parts—so it's infinitely more rugged (we threw it against a wall repeatedly to no detriment). Plus, the drive *is* the plug: no cable to worry about or forget.

Portable storage redefined: The Piccolo USB Flash Drive is smaller and sturdier than a hard drive—and much slower.



PHOTOGRAPH BY W. B. JONES

Smart as the Piccolo is, some of its design elements are plain dumb: mainly the cap. For example, there's no place to stick the cap once you've de-capped and plugged the drive into your Mac. Granted, there's a hole in the cap for attaching the device to your keychain, but if the cap comes off in transport, you could easily lose the drive.

If you're looking for the absolute most convenient portable storage solution—and you don't mind paying a premium for it—look no further than the Piccolo.—*Niko Coucouvanis*

good news: Way small. Almost indestructible. **bad news:** High price-to-MB ratio. Dumb cap design.



FireFly

hardware

Company: SmartDisk

Contact: 941-436-2500, www.smartdisk.com

Price: \$299.95

Requirements: Any Mac with onboard FireWire or G3 with powered FireWire PCI card, Mac OS 8.6 or later

If you thought Apple's iPod was the smallest, sexiest 5GB hard drive available, you're only half right. SmartDisk's FireFly packs the same Toshiba hard drive mechanism into an even smaller case with aesthetic charms of its own, including a stylish blue power indicator, a yellow disk-access light in the form of the FireWire symbol, and a sleek design that pleases both our hot-rod and sci-fi tendencies.

Inside the FireFly's svelte plastic casing, that Toshiba drive (a 1.8-inch, 4,200-RPM device) is a speed demon; we informally tested it against a full-size external FireWire drive—a 10GB, 7,200-RPM model—and the

With 5GB of speedy storage, the FireFly proves that great things come in small packages.

FireFly held its own (both drives copied a 170MB file in 35 seconds). We sucked a full-size (720 by 480) DV stream off the FireFly, and the video played back with no dropped frames or audio stutter.

Plugging the FireFly into a Mac is what the term *plug and play* is all about—right out of the box, we plugged it into an iBook (FireWire cable included), and the FireFly appeared on the OS X desktop. Same deal in OS 9.2.2 on the iBook, though on a Blue-and-White G3 (running OS 9.2.2), the FireFly mounted and faithfully froze the Mac every time we tried using the drive. This problem

disappeared when we installed the included SmartDisk Tools: Specifically, the FireWire SmartDisk Support extension was the missing link. For the record, we couldn't replicate the incident on any other rig—or in OS X on the same machine.

Frankly, you can get a lot more storage space in a not-much larger package than the FireFly offers for \$300, but this drive is so slick that we don't care.—*Niko Coucouvanis*

good news: Sleek. Stylish. Small. Speedy. **bad news:** Not cheap.



PHOTOGRAPH BY W. B. JONES

Coolpix 5000

hardware



Company: Nikon

Contact: 800-645-6687, www.nikonusa.com

Price: \$1,099.95 (SRP)

Requirements: G3 or faster Mac with built-in USB, Mac OS 8.6 or later

Nikon has become one of the top digital-camera choices among pro photographers. So we had high hopes for the Coolpix 5000, a compact 5-megapixel (2,560-by-1,920-pixel maximum resolution) digital camera that's jam-packed with every bell and whistle a pro could ask for. Though the camera produces outstanding images overall, it has its flaws.

The petite (4-by-3.2-by-2.6-inch) Coolpix 5000 is huge on features. That includes a 3X Zoom-Nikkor lens (equivalent to a 28mm to 85mm lens on a 35mm camera); 4X digital zoom; an aperture range of f-2.8 to f-4.8; a shutter speed capability of 1/4,000 of a second to 5 minutes; a built-in mic and speaker; a 1.8-inch color swing-out active-matrix LCD monitor; and modes out the wazoo for adjusting exposure, flash, metering, white-balance, noise-reduction, saturation—plus an excellent black-and-white mode. The camera also includes a 32MB CompactFlash card; a rechargeable LiIon battery; and a CD-ROM containing Nikon View 4, Canto Cumulus, and iView Media Pro. For high-res images, get a 512MB CF card—SanDisk sells 'em for \$429.99 (www.sandisk.com).

The camera's controls are easy to use, with the exception of the zoom button. Its crummy placement on the camera back's

The Coolpix 5000 has all the settings, modes, and features you could ask for—and most of them deliver excellent results.



The 5000's programmed auto mode snaps terrific pics with great depth and color accuracy—no futzing required.

upper-right corner—where our thumb naturally fell when we clutched the camera grip—caused mondo frustration. Time after time we unintentionally zoomed in, midshot, while gripping the camera with one hand.

But the proof is in the pudding, and when we set the Coolpix 5000 to a 100 ISO at the highest TIFF setting, the images it produced didn't disappoint—well, 95 percent of the time. The metering system did a commendable job of exposing our scenes with great depth and clarity. Pics were sharp and clean, and subjects kept their true color. The camera exposed objects in low light fairly well without flash, and created minimal noise using the noise-reduction setting.

If camera specs sound like a lot of gibberish to you, take heart: The programmed auto mode produces great images with one shutter click. Downloading images is just as simple: Connect the camera to any USB-equipped Mac via the included cable, and the

Though this image looks great at first glance, image artifacts appear on the mountain ridge bordering the cloud cover.



PHOTOGRAPH BY W. B. JONES



PHOTOGRAPH BY KRIS FONG

The 5000's black-and-white mode gave our photos more-dramatic tones than those produced by most other cameras we've tried.

camera shows up on the desktop like an external drive.

But alas, the Coolpix 5000 has a few glitches. Although the matrix meter correctly exposed shadowed and bright areas, purple halos between neighboring high-contrast subjects riddled some of our pictures (a pitfall of digital photography, but more pronounced in the 5000 than other cameras). Images taken at an ISO equivalent of 400 or greater were noisier than a pack of bar-hopping frat boys on buck-a-beer night.

In normal daylight conditions, images on the LCD were hard to see, no matter how much we adjusted the monitor. Unfortunately, the battery kept dying after 1 hour and 15 minutes of use (Nikon rates battery life at 1 hour and 40 minutes with normal use), though this might be due to our high-res capture and constant futzing with controls.

Overall, we like the Coolpix 5000 a lot; it's compact, has all the features we need, and can usually capture immaculate images. But if this camera wants to earn our rosiest rating, Nikon needs to address a few thorns.—Kris Fong

good news: Amazing quality at low ISO settings. Great set of features. Compact. **bad news:** Image artifacts in high-contrast scenes. Eats batteries. Noisy images at higher ISO settings.



Microtek ScanMaker 3800

hardware

Company: Microtek

Contact: 800-654-4160 or 310-297-5000,
www.microtekusa.com

Price: \$79.99

Requirements: G3 or above, Mac OS 8.6-9.x,
64MB RAM, USB port

The ScanMaker 3800 is Microtek's attempt to head off the likes of Canon and Umax in the budget scanner market. At about \$80, the ScanMaker's price is right, its software bundle (including Photoshop 5 LE and ABBYY FineReader Sprint OCR) is solid, and the device itself is well designed if a bit flimsy.

The included ScanWizard software's default Basic mode isn't impressive, but if

**Cheap, easy, and good enough for government work—
what more could you want in a low-end scanner?**

you switch to ScanWizard's Advanced Control mode, you get a streamlined interface with more options for fine-tuning your scan's color, brightness, and other image features.

The 3800's scan time is respectable: 95 seconds for a full-size, 600-dpi image. Colors were satisfactory, though a little muted, and some fine detail was missed. But at this price, you can't expect the world.

Like many scanners these days, the 3800 sports four programmable buttons on its front for postprocessing scans. For example, you can press the email button to scan in a picture, open your email client, and attach the scan to a fresh email. Press the OCR button, and the 3800 scans and recognizes

your text documents and sends the result to a word processor of your choice. For a budget scanner, it does this amazingly well.

The Microtek 3800 package offers an exceptionally usable scanner with good functionality; it's quiet, compact, and dirt cheap to boot. If your budget is limited and you don't need the highest resolution (or OS X support), the ScanMaker 3800 will suit you well.—Mark Sparrow

good news: Reasonably good scan quality. Good software bundle. Programmable shortcut buttons.
bad news: Slightly muted color output. Lower resolution. Flimsy.



PHOTOGRAPH COURTESY OF MICROTEK



Vet Emergency

fun & games

Company: Legacy Interactive

Contact: 323-463-0300, www.legacyinteractive.com

Price: \$19.99 (SRP)

Requirements: 266 MHz Power Mac or faster,
Mac OS 8.1-9.x, 32MB RAM, 212MB free hard disk space,
16X CD-ROM

Who doesn't want to help chinchillas that won't eat and dogs that get hit by cars? We don't. Suffering thorough Vet Emergency's clunky interface, cryptic medical tools, and condescending Vet staff makes the game seem more like work than educational fun.

Given the fanaticism of pet owners, Vet Emergency is a good idea. You, a budding veterinarian, heal pets by selecting medical tools (such as stethoscopes and IV needles) and clicking on injured parts of the patients' bodies. A PDA chock-full of patient information and medical research tells you the results of your tests and helps you work

**Vet Emergency provides
the tools of the trade, but
not enough info to use
them effectively.**

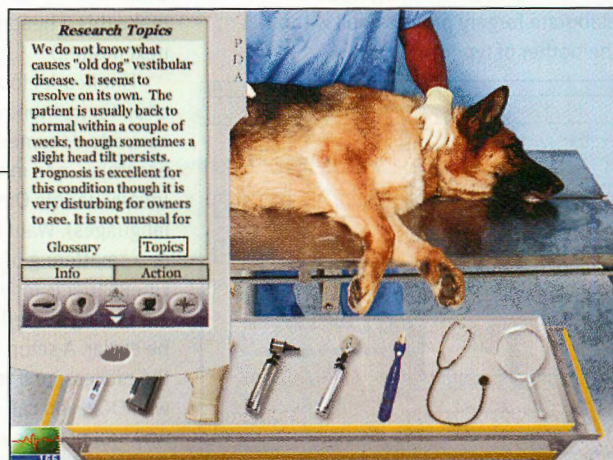
through 35 cases of real-life injuries. The pets are cute, although some close-ups (like one of a dog's bloody bunghole) are gross, but hey, you signed up for it. QuickTime videos of frantic pet owners are also funny. Succeed in healing the animals, and score high; fail, and an annoying vet staff berates you.

Unfortunately, Vet Emergency is extremely frustrating to play. Even the beginner mode fails to explain basic questions like why you'd stick a syringe in a rat's tail when his eyes seem to be bleeding, so it's hard to learn from your mistakes. A detailed manual explaining when and why you administer

treatments would help; plus, the interface is finicky about where you click to use a medical tool. We ended up killing a Siamese named Ming, because we couldn't locate the exact spot to administer the Pulse OX meter.

We're animal lovers. We wanted to like this game. But at least for now, Vet Emergency is too frustrating to play.—Narasu Rebbapragada

good news: Cute Pets. Funny owners. Good medical info.
bad news: Unresponsive interface kills pets. Hard to play. Lousy manual.



FineReader Pro 5 for Mac

productivity



Company: Abbyy

Contact: 877-328-2229 or 510-226-6717,

www.abbyyusa.com

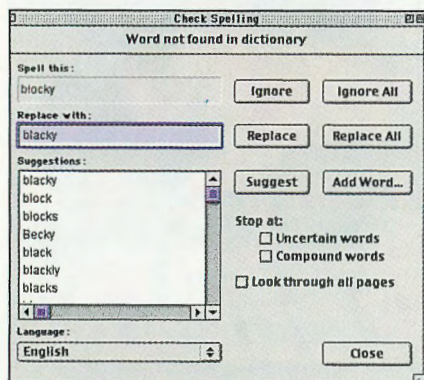
Price: \$129 (SRP)

Requirements: Power Mac; Mac OS 8.6-9.x; 32MB RAM; optical scanner, digital camera, or fax modem (device must be Photoshop plug-in compliant or TWAIN compatible)

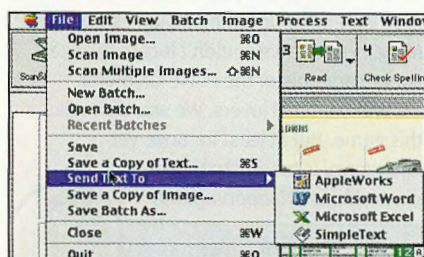


Find a demo of FineReader Pro 5 on the Disc.

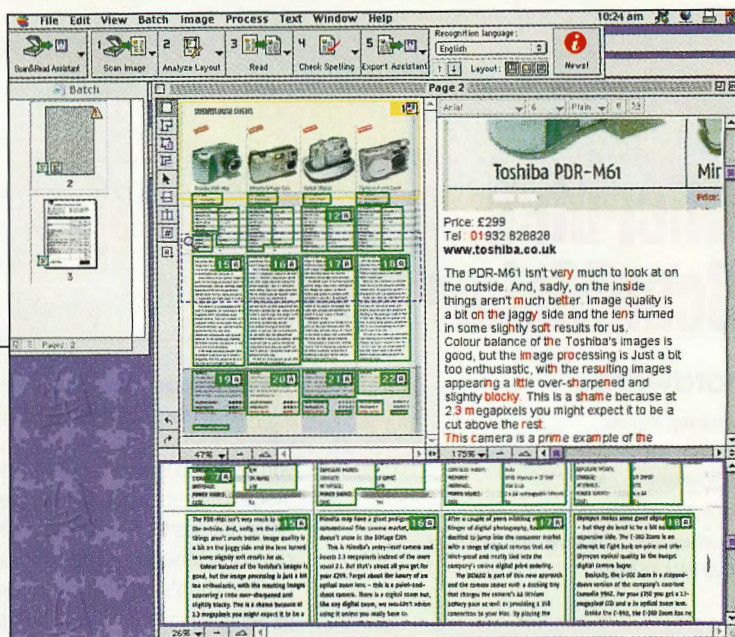
An optical character recognition (OCR) package is a very clever piece of software that turns pages of scanned text into editable text, just as if you'd typed them into your Mac conventionally. A good OCR program can also turn faxes (received as TIFF files) into editable text. You'd be surprised at the variety of uses for digitized paper-based documents. You can fill out legal forms, archive printed pages, create elaborate forgery projects—all without the bother of typing.



FineReader even checks the spelling of your scanned documents.



FineReader can pipe your converted text directly into many popular word processors—or into Excel, if you prefer.



FineReader Pro 5 is the new alternative for Mac OCR, but its smart, intuitive interface will seem very familiar—especially to OCR veterans.

The Mac-compatible-OCR landscape has always been pretty barren; before FineReader came to the Mac, your choices were ScanSoft's OmniPage Pro (www.omnipage.com) or the highway. (Note: OmniPage is still the only option for native OCR in Mac OS X, as FineReader requires the Classic environment, but OmniPage Pro X came out too late for us to make this a head-to-head review. Tune in next month.)

FineReader looks like it'll give OmniPage a run for its money: This killer application converts documents to text with deadly accuracy—and in up to 117 languages (nearly double OmniPage's 59 supported languages). Want to scan in some Somali or a smattering of Macedonian? Then FineReader is for you.

Getting started with FineReader couldn't be easier. A setup wizard guides you through the process, or if you have prior experience with OCR, you can just dive in and find your way around the package in no time.

Once FineReader scans in your document, simply click Layout Recognition. The program does a brilliant job of dividing even the most complex documents into boxes of text, graphics, barcodes, and tables, ready for recognition. FineReader's accuracy is nothing short of amazing: In all but the most ridiculously complex documents we threw at it, the program got the layout-recognition process spot on. For pages with unusual or complex layouts, you can set up FineReader manually to recognize individual page components and then reorder text boxes so FineReader addresses them in the correct sequence.

Once you're happy with the layout recognition, it's on to the next stage of the process, where FineReader reads the text and converts it into editable data. FineReader takes a while to do this, but that's because it does two sweeps over the text to make sure it's got things right. And how right it gets them! FineReader managed to score 100 percent accuracy in a number of our tests (OmniPage Pro 8 didn't fare quite as well, but we'll suspend judgment until we can properly test the current version).

Not only does FineReader recognize text, it also recognizes fonts, text size, and even type styles. It can then export the whole lot, intact, into an RTF (Rich Text Format) file, complete with embedded graphics. Of course, you don't have to stick with that level of formatting. You can set the preferences to export text to almost any format—from a simple ASCII text file, all the way up to a fully formatted, multicolumn PDF document, or even an HTML page for the Web.

Our beef with FineReader isn't so much that it works in Mac OS X only via the Classic environment; it's that the Web site and stated requirements lay claim to OS X support (never mind the fact that OS X-compatible scanners, Classic or not, are still a rarity), with "Classic environment only" hidden in the fine print. Otherwise, FineReader Pro is a top-notch OCR package.—Mark Sparrow

good news: Deadly accurate on layout and text. Awesome language support. Easy to use.
bad news: Not OS X native.



Survivor: The Interactive Game

fun & games

Company: MacSoft/Infogrames

Contact: 763-249-7600, www.wizworks.com/macsoft

Price: \$19.99 (ESP)

Requirements: 400MHz G3 or faster, Mac OS 8.6 or later, 96MB RAM (128MB for OS X), 8MB video RAM with support for OpenGL, 350MB free hard disk space

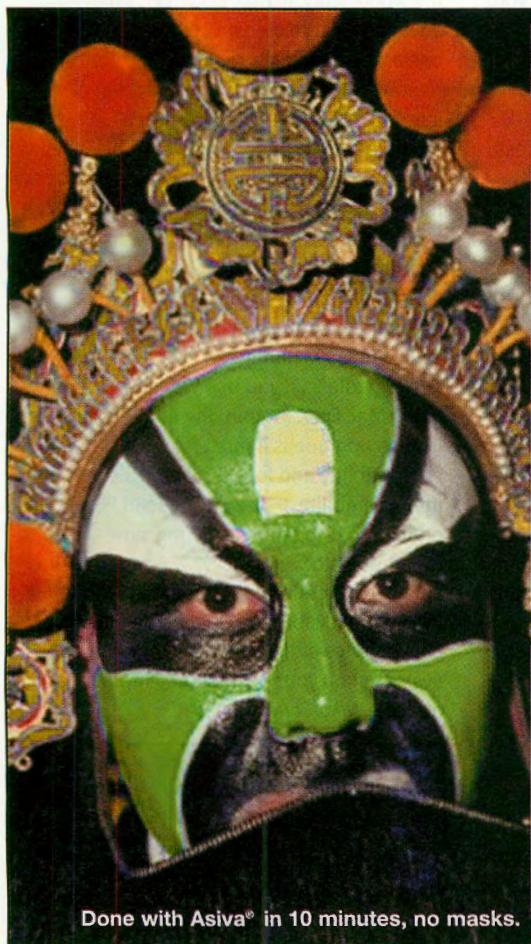
An utter waste of money and disk space, and not worth writing another word about.—Cathy Lu



As a member of any tribe from the first two seasons of *Survivor*, you participate in challenges for immunity. Here, you balance your character's effort level with their fatigue level in pushing the log—and, yes, it's as boring as it looks.

good news: One—or maybe two—of the immunity challenges are kinda fun.

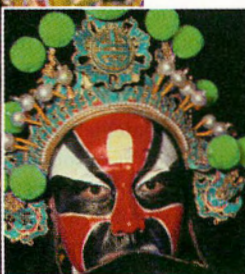
bad news: Graphics circa 1997. Inane gameplay. Dialogue loops get old *really* fast. Cheesy in-game cut scenes from the TV show *Survivor* (which, P.S., we actually like). Buggy.



Original



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Virtual PC 5

productivity



Company: Connectix

Contact: 800-950-5880 or 650-571-5100,
www.connectix.com

Price: \$199 (SRP), \$79 (upgrade from version 3 or 4)

Requirements: G3 (400MHz or greater for OS X;

original Apple processor, not upgraded), Mac OS 9.1

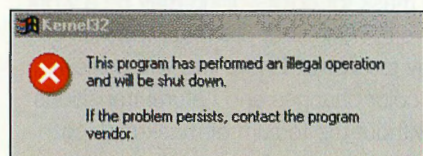
or later or Mac OS 10.1 or later, 128MB RAM

(196MB for OS X), 1GB free disk space

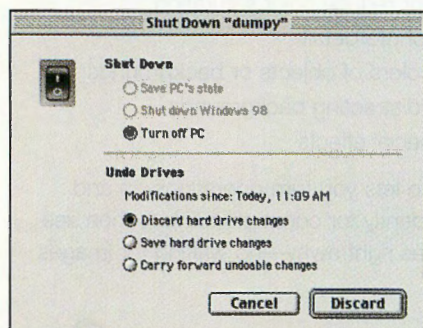
Part of being a Mac addict is learning how to live with your Mac in a Windows world. We've been calling on Virtual PC for all our Wintel needs for years, and version 5 makes it easier than ever to use PC-only peripherals and software and to open those stupid EXE attachments, worms, and other viral nuisances. Life is good.

Like many big-name applications, VPC 5 is the first Mac OS X-native version. Not on OS X yet? No worries—VPC 5's key word is *interoperability*: between the Mac OS and Windows, and now between Mac OS 9 and Mac OS X. One VPC installation runs in either version of the Mac OS and uses the same PC Hard Drive Images, so you never have to reboot your Mac or fire up the Classic environment to get at the (virtual) PC.

About those Hard Drive Images: We've always had the option of saving a PC



D'oh! Virtual PC is plenty stable, but Windows will be Windows.



When Windows takes a powder, you can undo the whole PC session, thanks to Undo Drives.



This makes us feel soooo dirty, but you gotta do what you gotta do, and Virtual PC does it very well.

session—even in the middle of installing a Windows OS—but VPC 5 goes a step further with the Undo Drives feature, which allows you to exit a PC session without saving any of the changes you've made to the Virtual Machine. This is a great, painless way to learn about Windows; it's very handy if you accidentally delete a BIOS file or otherwise botch a software (or OS) installation.

We tested the standard Windows 98 edition, but by the time you read this, Connectix will be offering the app with your choice of preinstalled OSs, including Windows ME, 2000, XP (Home and Pro), and Red Hat Linux. After *borrowing* Windows XP from our pals at *MaximumPC* and enduring the epic installation process, we have new appreciation for VPC's amazing ease of use. Install VPC, enter a Windows activation key, and that's it—undoubtedly the quickest, easiest PC setup ever. Next time we fancy trying another version of Windows, we'll try one of Connectix's accessory OS Packs, which are basically Hard Drive Images with other OSs preinstalled. You get the OS and the license sans the installation headaches.

Once you get a few versions of Windows installed, you can really geek out and network them via VPC's Virtual Switch. In Mac OS X, enabling the Virtual Switch turns your Virtual Machine into a full-on network node, where you can run HTTP and FTP servers that communicate with any other OSs running on your Mac and with the Mac itself. In Mac OS 9 and OS X, VPC makes basic networking (with your office LAN, printers, and the Internet) a no-brainer, configuring the PC according to your Mac's existing settings. Good stuff, since checking Web sites for cross-platform compatibility is one of VPC's main uses.

The saddest news we have to dispense about VPC is that it's still not a viable option for playing PC games on your Mac. We used a PC diagnostic utility to determine the speed and breed of our emulated PC. On a 600MHz iBook, it translated to a 400MHz Pentium Pro; on a Dual 800MHz G4, it was a raging 530MHz—maybe enough for a game of Scrabble. The processors scored similarly in each respective machine under OS 9 and OS X, but that 530MHz doesn't tell the whole story. In Mac OS X, VPC takes advantage of the dual processors, but it uses one processor strictly for powering window redraws, which makes for a much snappier interface. Despite VPC's Altivec and multiprocessor support, we were a bit miffed at the minor performance difference between the G3 iBook and the Dual G4. The kicker, though, came straight from Connectix's tech support. The company *knows* VPC is slower in OS X—by 20 to 35 percent, due to core differences in the system architecture of OS 9 and OS X. Bummer.

Regardless, if you use VPC and you're using Mac OS X (or thinking about using it), this upgrade is a must for OS X compatibility and for OS 9 and OS X interoperability. It offers rock-solid PC emulation, though it's still dog slow (dead-dog slow under OS X). We excuse the sluggish PC performance in light of Virtual PC's unbelievably easy installation and the convenience of having any PC operating system(s) on your desktop at a moment's notice.—*Niko Coucouvanis*

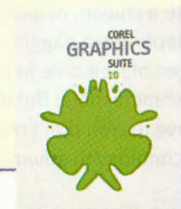
good news: Mac OS 9 and Mac OS X interoperability. Undo Drives can undo you out of a screwed-up system.
bad news: Still no replacement for a kick-ass PC gaming rig. Slow in OS X.





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Corel GRAPHICS SUITE 10. Intuitive and powerful graphics software specifically designed for Mac® OS X.



Red Faction

fun & games



Company: Graphic Simulations

Contact: 972-386-7575, www.graphsim.com

Price: \$44.95 (SRP)

Requirements: 300MHz G3 or faster, Mac OS 8.6 or later, 128MB RAM, 3D video card with 6MB memory, 1.2GB free hard disk space

Red Faction, Graphsim's intense new first-person shooter for the Mac, wastes no time getting to the action. You play Parker, a bright young man who came to Mars to work and do a little soul-searching. Less than a minute into the game, Parker witnesses a friend gunned down by a brutal guard, and the revolt begins.

You start the game deep in a mine shaft and unarmed, grabbing weapons as you make your way toward the surface. You'll encounter 15 weapons, from pistols and shotguns to flamethrowers and rocket launchers. Learn to use them well, because you'll do most of the fighting in the mine tunnels. Your fellow rebels die too easily to be much help. One or two shots, and they're done.

Parker is the hero of Red Faction, but he shares center stage with a widely hyped new technology called the Geo-Mod engine. A dandy device tinkered for PlayStation 2, then adapted to the PC before coming to the Mac, Geo-Mod promises a whole new dimension for first-person shooters. Experts will tell you it's a new generation of arbitrary geometry modification technology, but that's just a fancy way of saying you can blow more stuff to smithereens—things like walls and bridges. Terrain and environments are fully destructible, depending on the strength of your weapon. If you meet a locked door and have no key, just blast the walls around the door with a rocket launcher and step through the rubble.

Sounds superior, huh? You bet, but it could have been better. True, you can knock down a bridge to drop an enemy vehicle into a chasm, or blow away a ledge supporting a gaggle of guards. You can even blast a hole in the floor to make an instant foxhole. But darn it, you don't have to. You don't really need Geo-Mod technology to advance. You can take out

*If you liked **Blade Runner**, **Red Faction** is right up your alley—it begins deep in the plague-ridden mine shafts of Mars.*

those enemy vehicles just as easily with a rocket, or shoot the ledge-hugging guards one at a time with a sniper scope. But hey, even if Geo-Mod isn't required, you can still have fun with it. We never tire of blowing holes in things and watching scenery fly.

Another cool surprise is the presence of five controllable vehicles. As you fight your way through some 20 levels, you'll have a chance to commandeer a drilling rig that can take you through solid walls; an ATV that resembles a Jeep; a baby submarine that fires torpedoes; an Aesir fighter for aerial combat; and an armored personnel carrier sporting a 20mm chain gun. The ability to drive these vehicles is a definite plus.

Geo-Mod technology is much more fun in multiplayer games, and a generous supply of maps provides a backdrop for the three standard multiplayer modes: deathmatch, team deathmatch, and capture-the-flag. You'll get more out of the game if you gather a few friends (up to 16) for a LAN party or hit one of the Mac-compatible Internet services (such as GameRanger, www.gameranger.com) for online play.

Either way, singly or in multiplayer, you'll enjoy Red Faction. It may not be the most original shooter, but it has a good storyline, efficient level design, handsome graphics, and an easy learning curve. Add the Geo-Mod ability to blow stuff up and the five drivable vehicles, and you've got loads of adventure and excitement in store.—*John Lee*

good news: Hot shooting action. Five drivable vehicles. New Geo-Mod technology for blowing things up.
bad news: Geo-Mod potential is underutilized.



Motoring on Mars

Drivable vehicles furnish an awesome change of pace for foot-weary rebels. You'll commandeer powerful drillers, all-terrain vehicles, minisubs, aerial fighters, and armored personnel carriers to make your way through the 20 levels.



DRILLING RIG



ALL-TERRAIN VEHICLE



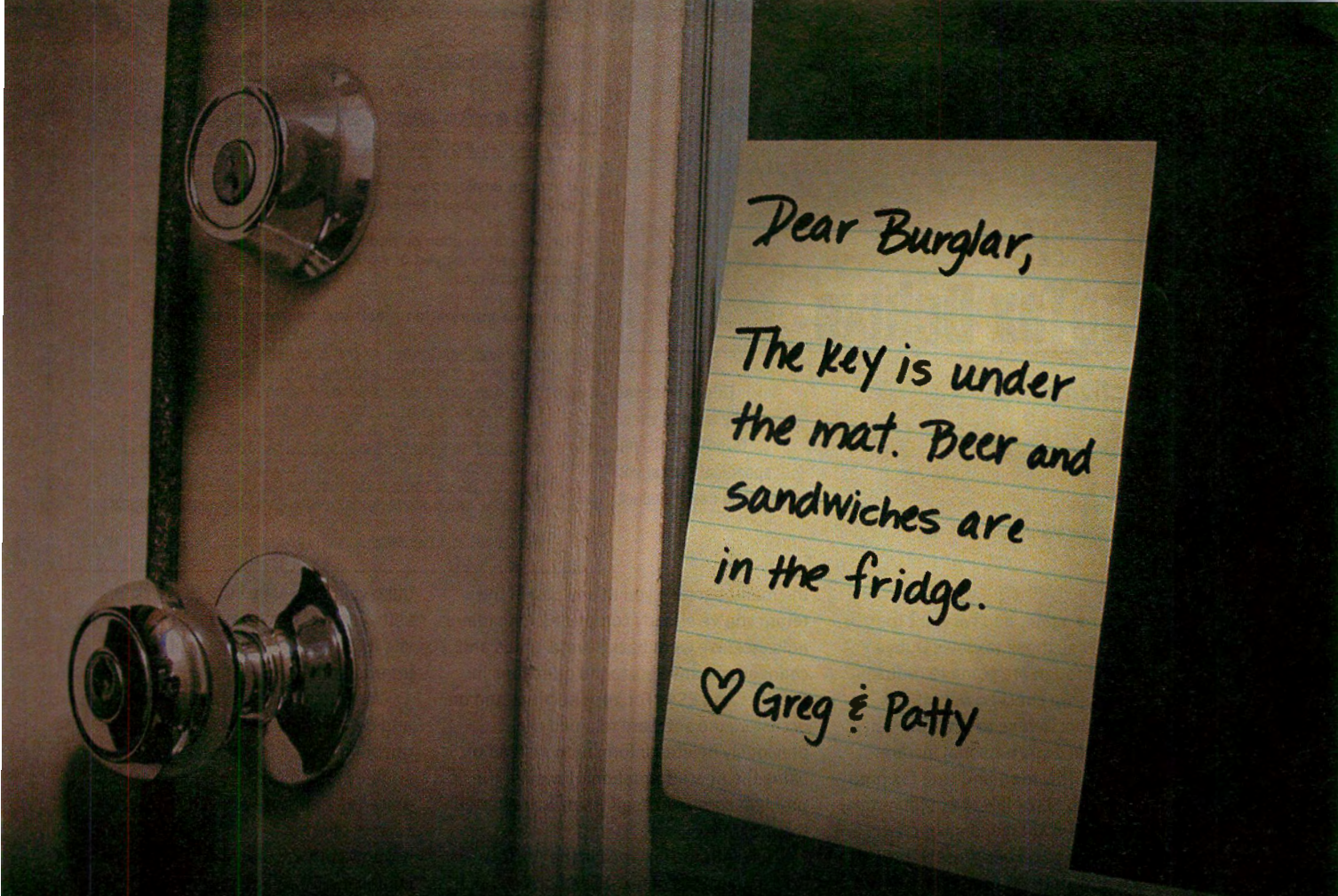
AESIR FIGHTER



SUBMARINE



ARMORED PERSONNEL CARRIER



Dear Burglar,
The key is under
the mat. Beer and
sandwiches are
in the fridge.
♥ Greg & Patty

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Quicken TurboTax Deluxe

productivity

9

Company: Intuit

Contact: 800-440-3279 or 650-944-6000,

www.intuit.com

Price: \$49.95 (SRP)

Requirements: Power Mac, System 7.6.1–Mac OS 9.x,
16MB RAM

This is what you
really want to know.
TurboTax tells you
specifically what you
can (and can't) deduct.

It's tax time again, and we want to know how all those tax laws Dubya pushed through are going to reduce our tax burden. We checked out Intuit's Quicken TurboTax Deluxe to see how quick and painless our 2001 personal income taxes could be. This tried-and-true tax prep app put a wealth of tax law at our fingertips, helped us take advantage of all our deductions, walked us effortlessly through our federal and state tax forms, and bored us to tears with its uninspired interface.

If you used TurboTax 2000, you're in for pretty much the same experience. Set-up is a no-brainer, and the interface looks largely the same. Intuit prides itself on having 17 years of financial expertise under its belt. You'd think it could have devoted at least a few months to jazzing up the stark data-entry windows.

Like last year, you can fill out tax forms by entering your personal information, income, deductions, taxes, and credits in a series of Q&A-format EasyStep windows. Alternately, you can choose Go To Forms from the Forms menu and enter information into actual federal and state forms.

If you do your taxes in several sittings, the app will ask if you want to continue where you left off, and buttons on the top of

the menu bar take you to any part of the return you've already completed. One minor nuisance: We went back several times and changed our answers to the questions in the IRAs And ESAs For 2001 section, and on occasion, the software retained the previously deleted information instead of using the new information. However, the problem corrected itself when we restarted the program.

New in TurboTax 2001 is the Tax Law Advisor, a series of text-based screens that explains how relevant tax laws affect you based on the information you enter in the EasyStep questionnaires. The Tax Law Advisor told us the laws regarding IRA contributions would change over the next five years, but it also told us something immediately useful: We contributed too much to our Roth IRA in 2001.

Intuit has also expanded TurboTax's capability to download your personal W2 and investment information. As of press time, six payroll companies allow employees to download their W2 data directly into TurboTax. We couldn't find out the total number of employers represented, but one of the payroll companies alone, W-2 Express, handles income information for more than 600 companies. In addition, 41 financial institutions allow TurboTax users

to download their 2001 investment data.

As usual, TurboTax lets you file state taxes (for one state only) for free, via rebate. And new this year, TurboTax lets you e-file your federal taxes for free

TurboTax explained that we contributed too much to our Roth IRA.

Small Business and Self-Employment

Contents Search Index Go Back Previous Next Close

Are any of my business travel expenses deductible?

If you are employed by someone else, your best bet, tax-wise, is to have your employer reimburse your travel expenses.

For more information on deducting your travel expenses, whether you are self-employed or work for someone else, see the appropriate topic.

For more information, click the following topics:

- [In general, what types of travel expenses can I deduct?](#)
- [What is my "tax home" and why is it important?](#)
- [What does lavish or extravagant mean?](#)
- [What travel records do I need to keep?](#)
- [I'm an employee. How do I deduct my travel expenses?](#)
- [What do I do if my trip was for both business and personal reasons?](#)
- [How do I prove that my trip was for business reasons?](#)
- [Do I have to do anything differently if my trip was out of the U.S.?](#)
- [What do I do if I've been assigned temporary duty away from my tax home?](#)

(also via rebate). Be sure to check for software updates from the TurboTax Web site for the latest changes in tax information.

We were impressed with the breadth and depth of Intuit's help system. Relevant questions you might have (such as "How do I qualify for a mortgage interest credit?") grace the right side of each EasyStep screen; clicking a question refreshes the window with your answer. The Help window contains a wealth of information in the form of tax Q&As, IRS publications, and tax law videos. If TurboTax's onboard help doesn't answer your questions, you can call or email live tax advisors at Keen.com. Individual tax advisors have their own rates, charging between \$1 and \$3 per user question. You can find out what different advisors charge before you choose one.

Overall, TurboTax 2001 is a straightforward, stable, easy-to-use piece of software. It walked us through our taxes, and we learned a little bit about tax law—all without too much pain.

—Narasu Rebbapragada

good news: Contains a wealth of tax help. Automatically downloads financial information.

bad news: Boring interface. You still have to do your taxes.



spiffy

TurboTax Home

1. Personal Info 2. Income 3. Deductions 4. Taxes/Credits

Blanche's Excess 2001 IRA Contributions

We've determined that Blanche's excess Roth IRA contributions for 2001 are \$1,000.

You can make combined contributions of up to \$2,000 per person per year to traditional and Roth IRAs. To avoid annual penalties, you must withdraw any excess contributions and earnings no later than April 15, 2002. We assume that you will not withdraw your excess contributions. If you decide to withdraw them, you must return to the IRA contributions topic and reenter your net 2001 contributions.

If you will withdraw any of Blanche's current year IRA contributions by April 15, 2002, enter the withdrawn amount.

Back Continue

Form 5329-S Go to Forms

April 15th, 11PM

Intuit offers a tax product similar to TurboTax on the Web at www.turbotax.com. You can use it to complete your tax forms and file online at the last minute (or beyond). You access it via your Web browser, and Intuit stores all your financial information on its secure servers.

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 THAT IS, OF COURSE, IF YOU **BELIEVE** IN BOUNDARIES.

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SEQUENCES

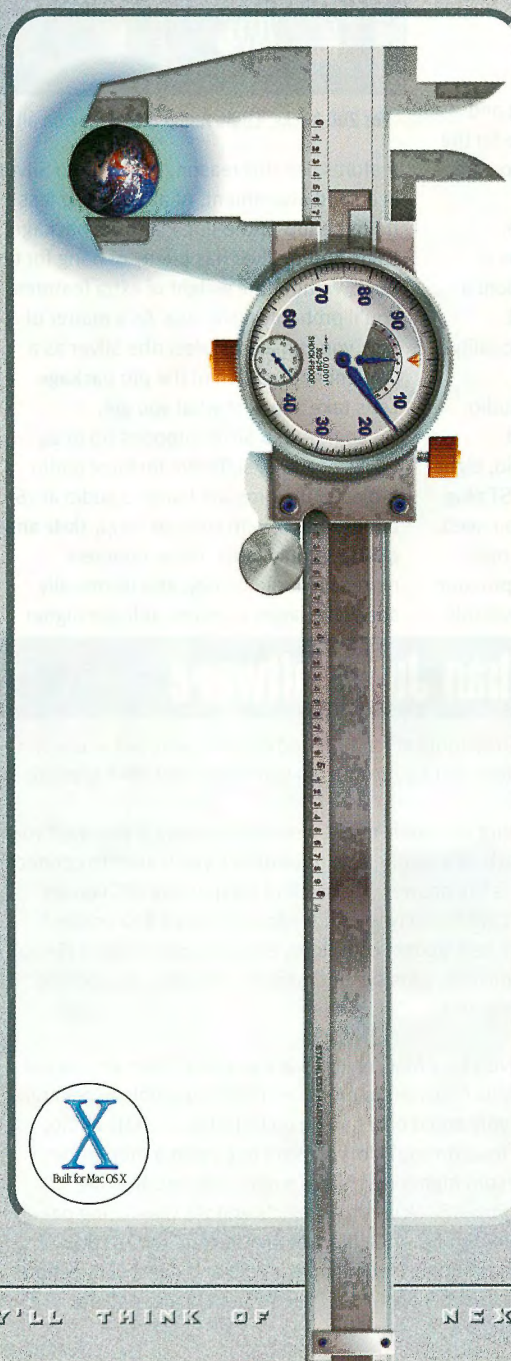
DIRECT
FLASH
EXPORT

TINY
ACCURATE
PDF
CREATION

EFFICIENT
INTUITIVE
IMAGE
SLICING

DENEBA-
SHARE

ONE-CLICK
SHORT
CUTS



Boundries? Who needs 'em? After all, why shouldn't your technical drawing program excel at web imagery, page layout and presentations? Now with Canvas 8, we've added some new features that will send you soaring.

Things like automated scripting and sequences. Sophisticated slide presentations you can easily share with others—even if they don't have Canvas. Full data-stream compression and embedding of fonts for the tiniest, most accurate PDFs. Not to mention the ability to export directly into Flash. And while Canvas has always been a most accommodating graphics software, new, easy-to-use DenebaShare™ makes peer-to-peer file sharing a piece of cake. Plus you can password protect your files for absolute confidentiality.

So if you're the type of person with boundary issues, perhaps you should think twice before trying out the boundless capabilities of new Canvas 8. For the rest of you, we say more power to you—at only \$399 it's the best graphics software value on the planet.

DENEBA IT'S WHAT THEY'LL THINK OF

NEXT

CANVAS⁸

Logic Audio Silver 4.7.3

audio

9

Company: Emagic

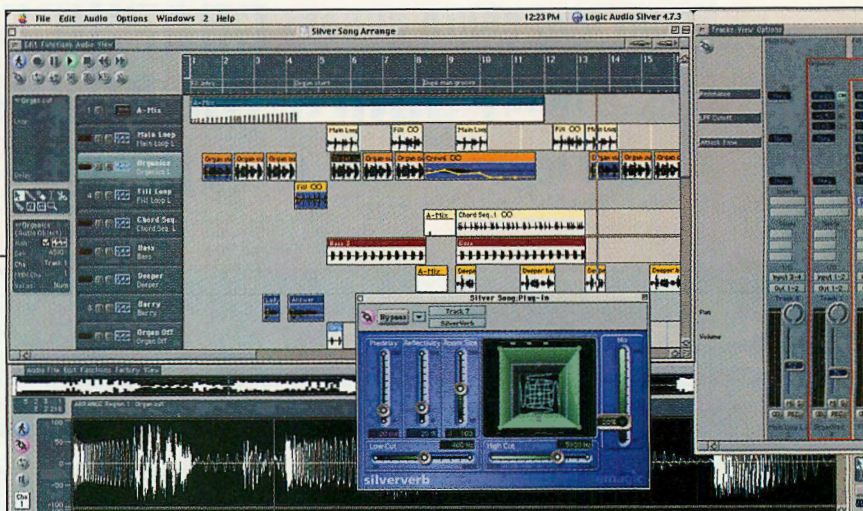
Contact: www.emagic.de

Price: \$199.95 (ESP)

Requirements: 200MHz Power Mac 604 or later, Mac OS 8.6–9.x (9.x for USB), 64MB RAM

The world of MIDI sequencing and digital audio is a strange one for the beginning musician, and if you are thinking of visiting it, you're in for a challenging but rewarding experience. Emagic entices you to join the millions of Logic Audio users with the Silver edition: a reasonably priced, intermediate-level package with much of the core functionality of the pro-level Logic Audio Gold and Platinum editions. Obviously, Logic Audio Silver lacks some of its kin's high-end features, but with its 24 tracks of audio, eight audio instruments, and support for VST plug-ins and instruments, it might be all you need.

If there's one thing a seasoned Logic Audio user will tell you, it's that the program is so deep you'll never use all the available



For 200 bucks, Logic Audio Silver may be all you need for professional audio.

features. For this reason, Logic Audio Silver is a good investment. At about \$300 less than the top-of-the-line Platinum package, Logic Audio Silver has plenty of bang for the buck, without the weight of extra features you'll probably never use. As a matter of fact, you can almost describe Silver as a streamlined version of the pro package. Let's take a look at what you get.

Logic Audio Silver supports up to 24 tracks of audio, sufficient for most audio projects. The program handles audio at 16-bit resolution, with support for 44.1kHz and 48kHz sample rates. These numbers represent audio quality, and technically speaking, larger numbers indicate higher

quality. While it's true that pro packages can handle 24 bits, don't let the audio snobs tell you 16-bit audio is for chumps—Logic Audio Silver offers superb audio quality.

Effectwise, Silver allows four sends per channel for bus effects, plus two inserts per channel for dynamic effects; the built-in effects are surprisingly good, compared to those of some other digital-audio apps. The SilverVerb, for example, while not the last name in realistic reverb, gives pleasing results and works well in any mix. We do have a tiny problem with the EQ, however: You control it with sliders or numerical entry, as opposed to knobs and visual feedback. This may be unintuitive for folks with a hardware background. Interface design aside, the quality is still very good.

One really great inclusion is the Time and Pitch Machine, Logic Audio's time-stretching and pitch-shifting tool. Silver's version is slightly less refined than the one in the Gold and Platinum packages—it lacks some harmonic control. But it's there if you need it, and in many musical projects it's quite necessary.

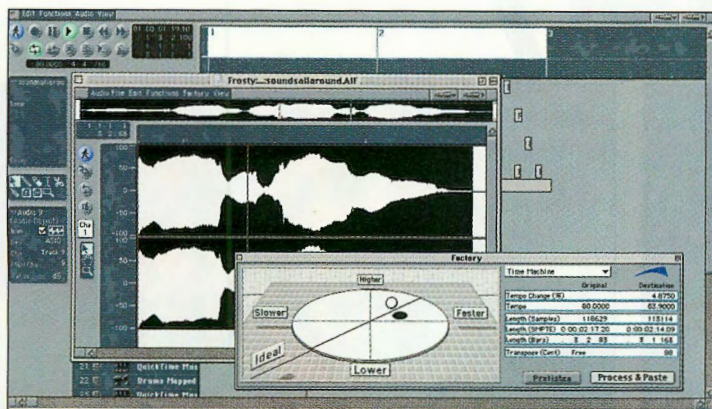
One new development sweeping the digital-audio industry off its feet is VST (Virtual Studio Technology), a technology introduced by Steinberg. Many digital-audio applications, including the Logic Audio line, are adopting it. Essentially, VST opens the door for third parties to develop plug-ins, such as audio effects and virtual instruments. With virtual instruments (Audio Instruments in Logic-speak), you can play synthesizers, like Native Instruments' Absynth (www.nativeinstruments.de), and samplers, like Emagic's own EXS2, all within Logic Audio Silver. That's just too cool. There is one drawback, however. At version 4.7.3,

You Need More Than Just Software

Logic Audio Silver is a full-featured tool set for MIDI and digital audio, but you won't get very far in the program unless you equip yourself with some real-life hardware.

MIDI MIDI is a protocol for connecting electronic music devices. Naturally, if you want your Mac to talk to a MIDI instrument (such as a synthesizer or sampler), you'll need to connect the two somehow. A MIDI interface is the answer. You can find inexpensive MIDI boxes that connect to your Mac's USB port. Midiman (www.midiman.com) has a \$70 solution called the USB Midisport 1x1. For the less budget conscious, Emagic's own Unit8 (\$500 ESP) has support for multiple MIDI devices, plus synchronization with other equipment such as video machines and DAT recorders.

Audio Interface If you have a relatively new Mac, chances are you don't have any way of getting sound into it. If you're a serious musician or producer, that's no problem, because the old audio inputs of the Macs of yore could only handle up to 16-bit, 44.1kHz audio, and you don't want to be limited to that, do you? No, you want to go with a third-party audio interface that allows you to record higher-resolution audio. USB and FireWire devices are available for iBook and PowerBook users. Emagic's emi 2|6 (see facing page) can handle up to 24-bit, 48kHz audio through USB. Mark of the Unicorn's MOTU 828 FireWire solution (www.motu.com) has support for multiple inputs and direct connections to devices with digital outputs, such as the Alesis ADAT (see *Reviews*, 2/02, p58, for more information).



You can use this 3D image as an interface for independently controlling the speed and pitch of an audio file.

Silver has a single stereo output for Audio Instruments, which means you can't take full advantage of many samplers. Steinberg's Halion VST, for example, has 12 VST outputs, but you can only use two of them when using the sampler in Logic Audio. Emagic says it will address this in version 5. In the meantime, we're content with Silver's support for a generous 8 Audio Instruments and 21 Effects Plug-ins per session.

Like any power tool, Logic Audio Silver requires some learning. The program ships

with a formidable manual. It's a good idea to study up on the concepts of MIDI and digital audio before you consider buying the product. Logic actually isn't that difficult to get the hang of if you've used similar apps before—if you haven't already, visit www.harmony-central.com and get yourself some free education on MIDI. When you're ready to dive into Logic, go for it, but buy a couple of instructional videos from www.gearvision.com. Trust us. It's the best way to learn the basics of Logic Audio.



With VST 2.0 support, you can load third-party audio effects and software instruments.

We highly recommend this product. Emagic will be quick to address most of the current version's technological limitations in incremental upgrades. We just hope to see Logic Audio running on Mac OS X soon.

—Andrew Tokuda

good news: Perfect feature set for the price. VST 2.0 support.
bad news: Limited VST Instrument outputs. Not Mac OS X ready.



emi 2|6

hardware

Company: Emagic

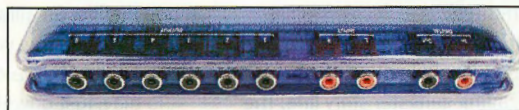
Contact: www.emagic.de

Price: \$399.95 (ESP)

Requirements: 200MHz Power Mac 604 or later with USB port or USB card (G3 or G4 with built-in USB recommended), Mac OS 9.0.4 or later, CD-ROM or DVD drive

Why go with USB when FireWire is faster? Why does it have six outputs? These are the questions that came up when we looked at Emagic's emi 2|6 USB audio interface. After a little bit of real-world use, we discovered that this videotape-size blue box is designed just right for professional and nonprofessional use.

The emi 2|6 is a conduit for getting analog sounds into your Mac via USB. It can handle up to 24-bit, 48kHz audio and is



It's small and it's bus powered, which makes it perfect for portable music production.

powered by the USB bus. With a headphone jack and volume controller, this unit makes a great portable solution.

USB is much slower than FireWire, but it's fast enough to push multiple, high-quality channels of audio. We piped a fat 24-track arrangement through the emi, and it played smoothly on the attached Mac—thus debunking the myth that USB is too slow for audio. We're believers now.

If you pair up the emi 2|6 with a digital-audio application that has Surround Sound options (such as Emagic's Logic Audio

Platinum), you can utilize the six outputs for Surround Sound production. For DVD authors, this is a great way to jump on the 5.1 Surround bandwagon. It's fun to play with, too!

The only drawback is that like many digital-audio products, the emi 2|6 doesn't work in Mac OS X (yet).—Andrew Tokuda

good news: Great-quality audio. Very portable. Surround capability.
bad news: Not Mac OS X ready.

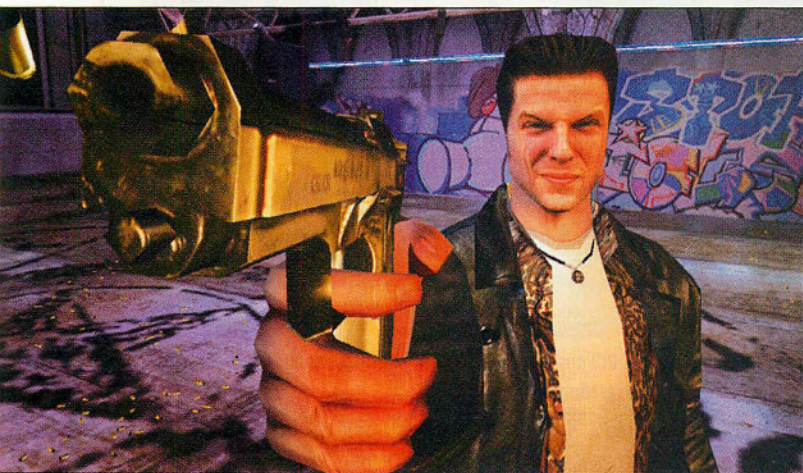


PHOTOGRAPH BY W. B. JONES

9

powerplay

We're game, are you?



Undercover cop Max Payne is pissed off.

The Plots Thicken

More Graphics, More Story, and More Players

Sure, you've played shooters and role-playing games, but you haven't played *these* shooters and role-playing games.

Three new titles bust the limits of what we thought these genres could handle. While we're sharpening our talons to grab the first available copies, here's a look at what all the fuss is about. —NR

Max Payne

MacSoft (www.wizworks.com/macsoft)

Available May 2002

Prepare for Payne. This bullet-riddled shooter has wowed even the most hardened of PC gamers and is coming fast to the Mac. Payne's not for kids. The plot opens with undercover cop Max Payne coming home to find his wife and child murdered. Fueled by vengeance, he goes on a hunt to kill the thugs who killed his family. Things are complicated by the fact that he's been framed for murder himself, so he's got to dodge his crime-fighting brethren.

This third-person shooter has great cinematic scenes, à la movie director John Woo, and an engaging gangster story line. The graphic detail is incredibly realistic, down to the individually modeled bullets. And with *Matrix*-style slow-mo action, you can slow down firefights for better accuracy in placing (and dodging) bullets. The difficulty level adjusts to match your skill, so you're never bored. We're warming up our trigger fingers.



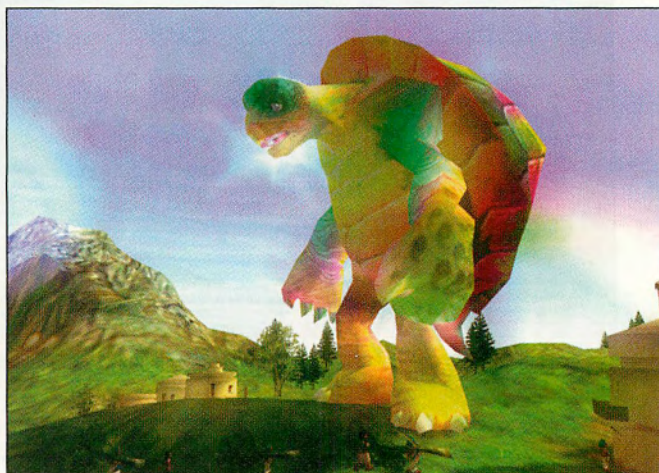
Max Payne's *Matrix*-style slow-mo shooting hits the Mac in May 2002.

Black & White

Feral Interactive (www.feral.co.uk)

Available Now

That god over there is you. Sims fans and megalomaniacs can rejoice now that *Black & White* is out for the Mac. More than a mere RPG, this game requires strategy, resource management, and combat—fought with Miracles (fireballs, lightning storms, and the like) and the



In *Black & White*, slow and steady can crush a race.

villagers who worship you. After your plebes summon you, you can either bring them wood to help them build your temple or you can toss them one by one out to sea. It all depends on whether or not you're evil. The plebes' prayers are what fuel your Miracles and determines your sphere of influence, so you can persuade your subjects to worship you through kindness, or scare them into submission with fire-and-brimstone-style tactics. By the time you indoctrinate all of the Tribes in single-player Eden, Feral expects to have a multiplayer patch available, so you can vie against other gods for the capital G.



You control the love in the jungle in *Black & White*.

Lineage: The Blood Pledge

NCsoft (www.lineagethebloodpledge.com)

Available Now

Ever feel left out? We did, when we heard that 4 million gamers worldwide already subscribe to Lineage: The Blood Pledge, a subscription-based online RPG. In this medieval fantasy, you join a Blood Pledge, an alliance of online gamers, and take over a castle, from which you rule your kingdom, collect taxes, and get rich. You play a knight, a wizard, an elf, or a prince or princess.

To play, just download the client software, which connects you to the other online players. NCsoft adds new chapters almost every month. You can play Lineage free for the first 30 days, after which time U.S. residents pay \$15 per month to keep playing.



Meet this toothy smile online in Lineage: The Blood Pledge.

The Games Go On

More Mac Madness Just for You

The Sims: Hot Date

Aspyr Media (www.aspyr.com)

Available March 2002

Aspyr brings you The Sims: Hot Date, the latest expansion pack for the wildly popular Sims series. Hot Date brings you a new downtown with restaurants, shops, parks, and a beach—all very conducive to gossiping, giggling, and smooching. Watch out for new characters like Dream Boat and Femme Fatale, and increase your Sims' odds of success by buying them love seats. Hot Date promises to be hot stuff.



Sims get lucky the way you do.

4X4 Evolution 2

Aspyr Media (www.aspyr.com)

Available Now

For those who missed the kinetic off-road driving game the first time around, those muddy SUVs are back in 4X4 Evolution 2. Now featuring vehicles by the likes of Jeep, Dodge, Nissan, and even Lexus, the game lets you drive through 32 courses worldwide. Winning races advances your career and gives you money, which you use for tricking out your truck. Like the first 4X4 Evolution, the creative ways you can crash your vehicle makes losing as fun as winning.



That's us: the SOB in the SUV.

Civilization III

MacSoft (www.wizworks.com/macsoft)

Available Now

Now Sid Meier fans can trade, fight, sweet-talk, and enlighten their way to a bigger empire. Civilization III, the newest iteration of the popular strategy series, is here. A revamped artificial intelligence makes diplomacy, and now culture, viable ways to expand your empire. Intercivilization trade is now more sophisticated and realistic, plus you'll have to be culturally sensitive toward the people you conquer. Still, if you're the aggressive type, you'll enjoy the more-sophisticated combat controls. Either way, you'll likely to get a lot less sleep during the upcoming months.



Civ III gives you better maps, better graphics, and better ways to manage trade, culture, and diplomacy.

The Operative: No One Lives Forever

MacPlay (www.macplay.com)

Available Q2 2002

Think Austin Powers' Felicity Shagwell with smaller boobs and bigger balls, and you've got Agent Cate Archer, a beautiful but deadly antiterrorist operative. In The Operative: No One Lives Forever, Archer takes you underwater, over land, and in parachutes through the exciting world of 1960s espionage in this stylish first-person action-adventure game.



Like any Bond girl worth her salt, this agent's deadly cute.

SCREENSHOT OF THE MONTH

Try this, Leonardo.



Artist's Statement

These screen shots were taken during a LAN game of Unreal Tournament using the Tactical Ops mod. Who says Titanic isn't a guy's movie?—Eric Darst

Send your best screenshots to letters@macaddict.com with the subject line "Screenshot of the Month." Don't forget to write down the name of the game you're playing and just what the heck you're trying to do.

The Rad New Radeon

ATI Unveils a New Card for Gamers

In January 2002, ATI introduced the brand-new Radeon 8500 Mac Edition, an AGP graphics card the company is pitting against nVidia's GeForce3. ATI says the new card offers clock speeds of 250MHz and 64MB of DDR memory. For games, the Radeon 8500 Mac Edition will enhance rendering speed, texture, lighting, and antialiasing of 3D graphics. The card uses advanced deinterlacing algorithms for better DVD movie playback. Both Mac OS 9 and Mac OS X compatible, the Radeon 8500 Mac Edition should be available by the time you read this.—NR



More and more games are adopting ATI's 3D technologies, which improve the speed and quality of game graphics.

how to

Because inquiring minds have the right to be inspired.

Design a Mac OS X Icon

by Jason Whong



WHAT YOU NEED

- Mac OS X
- Adobe Photoshop or comparable image editor
- Icon Machine III (\$25, www.uncommonplace.com)
- Digital camera or camera-scanner combo



This stuff's for the pros.



It'll take some effort, but you can do it.



The fundamentals, if you will.



Find a Photoshop Elements 1.0 tryout and Icon Machine 3.0b11 on the Disc.

One of the most unique ways to stamp your personality onto your Mac is to replace its standard icons with creations of your own. In pre-Mac OS X systems, these small graphics could measure up to 35 by 35 pixels (depending on the OS), and they made it easy to spot files as you navigated through a sea of folders. With Mac OS X, icons have gone from mere 35-pixel graphics to 128-pixel scalable works of art.

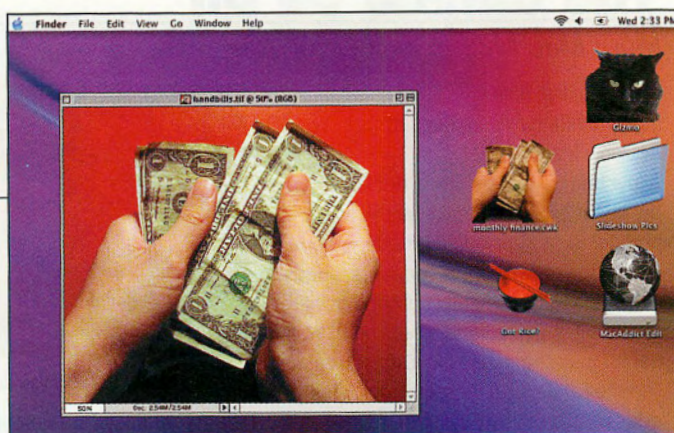
While anyone can easily copy and paste photos to create icons, making a high-quality Mac OS X icon that's resizable takes some time. But if you strive for uniqueness, it's time well spent. First decide on a concept the icon will convey, whether it represents a file, an application, or a folder. Once you've got an idea, here's how to turn your concept into an OS X icon creation of your own.

1 Snap a Pic

Our icon for an AppleWorks finance spreadsheet could benefit from a makeover—an image of hands counting dollar bills seems appropriate (though feel free to use Benjamins, Grants, or Jacksons if you're not a writer by trade). Compose your subject on a uniformly colored surface so you can easily knock out the background in an image editor later. To keep your icon composition consistent with that of the OS X icons, light your subject from above, then shoot it from roughly a 45-degree angle for the same perspective. If you're shooting with a digital camera, download the image to your Mac. If you're using a film camera, develop the film, then scan the print.



Light your subject from above and shoot it from a 45-degree angle to keep it consistent with Apple's icons.



Why settle with Apple's generic OS X icons when you can create your own mini works of art?

2 Knock Out the Background

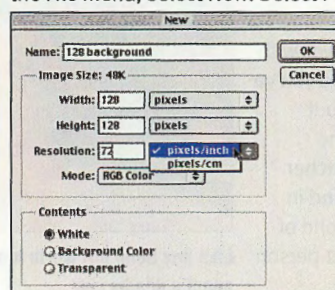
Once you've got your digital image, open it in Photoshop or a comparable image editor. If your image needs any correcting or refining, do so now. Because icons are square, it's best to crop your image so it will display well in this shape. Then select the magic wand tool, hold down the Shift key, and click all the background areas. Press the Delete key to remove the background from the photo. Don't worry if your image looks a little rough around the edges after you knock out the backing; once you shrink down the image (step 4), nobody will notice.



Get rid of the orange background by selecting it with the magic wand tool and pressing the Delete key.

3 Create a Blank Document

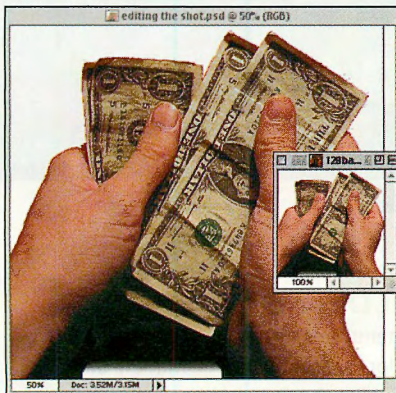
The largest an OS X icon can be is 128 pixels square, so you need to shrink your photo to fit this size. In Photoshop, create a new document to serve as your icon's framework. Under the File menu, select New. Select Pixels from the Width and Height drop-down menus, enter 128 into the Width and Height boxes, enter 72 for the Resolution, choose Pixels/Inch in the Resolution pop-up menu, and click OK.



Create a new 128-by-128-pixel document in Photoshop to serve as your OS X icon's framework.

4 Shrink It Down

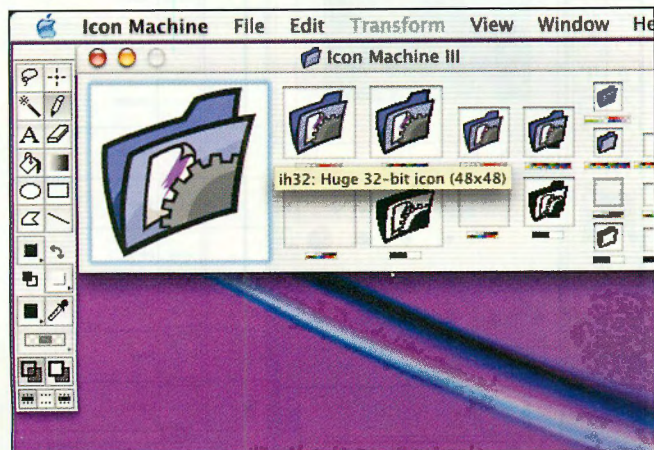
Go back to your photo and select Image Size from the Image menu to open the dialog box. In the Pixel Dimensions section, if your photo has a larger width than height, enter 128 in the Width box; if your photo has a larger height than width, enter 128 in the Height box. Enter 72 for Resolution, choose Pixels/Inch from the Resolution drop-down menu, check both the Constrain Proportions and Resample Image boxes, select Bicubic from the Resample drop-down menu, and click OK to make the change. Then select all (Command-A), copy the image (Command-C), switch to the new document, and paste in the photo (Command-V).



Since Mac OS X icons have a maximum size of 128 by 128 pixels, scale down your photo accordingly.

5 Rage with the Machine

Icon Machine not only helps you create a 128-pixel icon, it also can render it into smaller icon graphics, so you can control how your icon looks in other states—in a list view, say, or scaled down on your desktop. Drag any OS X icon onto the Icon Machine application icon to view its various states, or launch Icon Machine and roll your cursor over any square in the template to see what each represents. Then go back to your 128-pixel document in Photoshop, select the entire document (Command-A), copy the image (Command-C), switch back to Icon Machine, and select New under the File menu to open a new template. Click the thumbnail-icon square in the template (the large leftmost square), then paste in the image (Command-V). To keep the backdrop transparent, double-click the thumbnail image to open the editing window, select the magic wand tool, click the white background, press the Delete key, and then close the window.

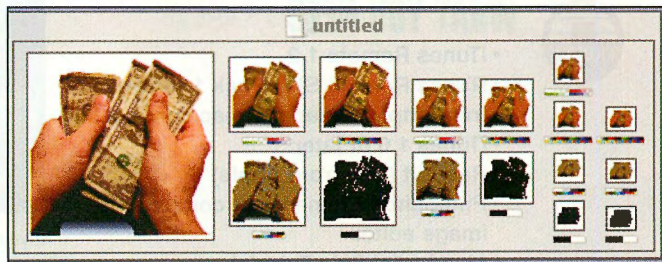


Each square in the Icon Machine template represents a different icon size and state. Roll your cursor over any square to get the details.

Freelancing vet Jason Whong really does keep track of his monthly finances in AppleWorks—honest!

6 Drag to Spawn Icons

To generate icons of various sizes for the Finder, just drag the image from the thumbnail-icon square into any of the smaller boxes to generate that box's designated icon size and state. For Mac OS X, drag the image to the Huge 32-bit Icon, Large 32-bit Icon, and Small 32-bit Icon boxes. To display your icon in Mac OS 9 and earlier, drag the image into the three 256-color boxes. You can also generate 16-color and black-and-white icons, though the results may be less than wonderful if you're using photos. When satisfied, select Save from the File menu, give your icon a name, and click Save.

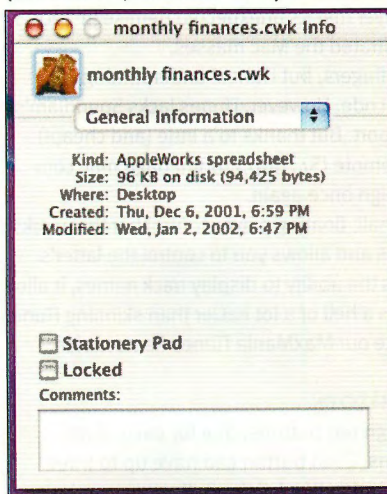


Drag the image from the largest square to the smaller squares to spawn an entire icon family.

7 Paste the Icon

To stamp your icon onto any Finder icon or even onto your hard drive (if you have OS 10.1 or later), click your new icon file, open the Show Info dialog box (Command-I), and copy the image (Command-C). Click the icon you wish to replace, open the Show Info

dialog box, click the icon image, paste in the new icon (Command-V), and close the dialog box. To get a good look at your handiwork, choose Show View Options from the View menu and work that Icon Size slider to your heart's content.



Replace OS X icons by simply copying and pasting from Info boxes—almost as you would have done pre-Mac OS X.

Alternative Apps

Icon Machine isn't the only Mac OS X icon creator and editor around. Here are two software alternatives.

IconBuilder Pro (\$69, www.iconfactory.com) is a powerful icon editor that functions as a Photoshop plug-in. If you're married to Photoshop, this shareware app is the way to go.

Apple's Icon Composer is on the Mac OS X Developer Tools CD, which means it's free if your Mac came with this disc. Icon Composer isn't an editor, but it lets you assemble icon assets made in Photoshop.

Customize iTunes Remote

by Jason Whong



WHAT YOU NEED

- iTunes Remote 1.2
- iTunes Remote Skin Pack 1 (download from <http://homepage.mac.com/belithe>)
- iTunes 1.0 or later
- ResEdit (free from Apple)
- Photoshop Elements or comparable image editor
- MacAddict Skin Tutorial Files (on the Disc)



Find the MacAddict Skin Tutorial Files, iTunes Remote 1.2, and the Photoshop Elements trial on the Disc.

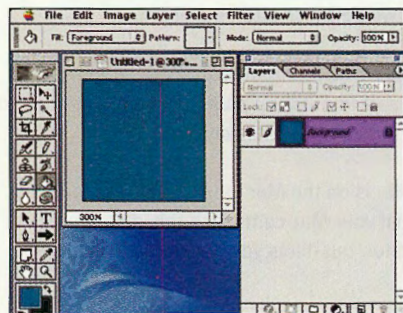
Remember Mango Ginger Jam? Petroglyph? wonderJelly? Prior to Apple's release of iTunes in January 2001, Casady & Greene's SoundJam MP ruled. This software-based MP3 player and encoder—capable of sporting a greater variety of looks than Madonna—allowed Mac music fans to slap *skins* (custom-designed interfaces) on the player to give it a radically different look. However, the popular player met its unexpected demise in 2001, not long after iTunes had infiltrated the Mac masses.

Why? We won't point fingers, but iTunes' underpinning is unmistakably SoundJam code. However, iTunes lacks SoundJam's coolest feature: skin support. But thanks to a little (and cheap!) shareware app, iTunes Remote (\$4, <http://homepage.mac.com/belithe>), diversity can reign once again.

iTunes Remote is a small, floating player control bar that works in conjunction with iTunes and allows you to control the latter's functions. Though it lacks the ability to display track names, it allows custom skinning, which is a hell of a lot easier than skinning iTunes itself. Here's how to create our MaxMania iTunes Remote skin.

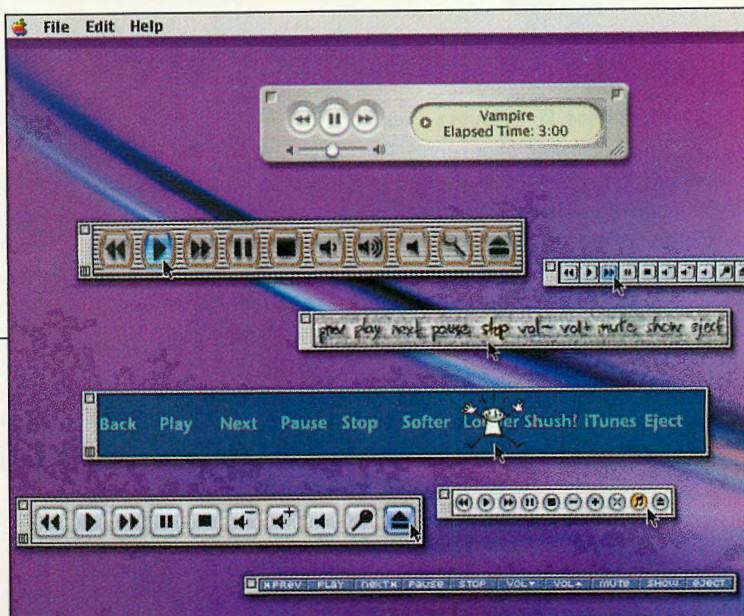
1 Build a Button

You need to design ten buttons, one for each of the remote's functions. Each button can have up to three states: normal, rollover, and active (clicked). Buttons can be any shape, but for simplicity's sake, we created square buttons. Launch Photoshop. Under the File menu, select New. In the dialog box, enter 50 pixels for Width and Height, 72 pixels per inch for Resolution, and click OK. Zoom in 300 percent for a better view. Click the foreground color in the tool palette to open the Color



Picker, choose a dark blue color, and click OK. Select the paint bucket tool and click the canvas to turn it blue.

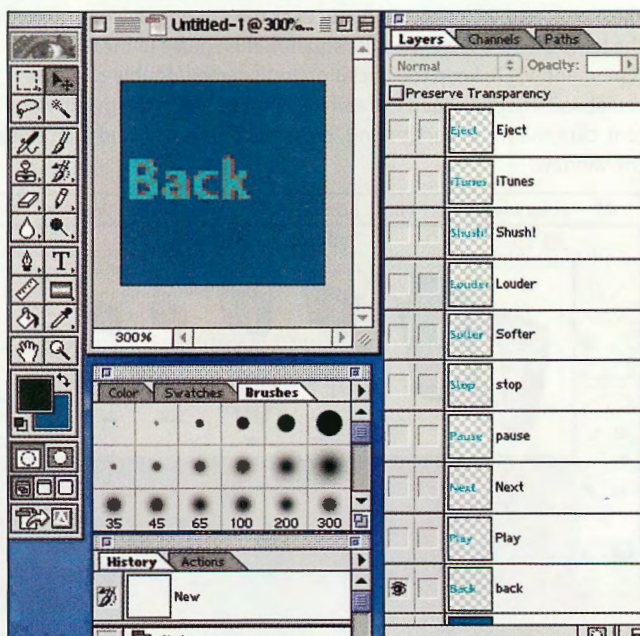
Fill the button with color using the paint bucket tool.



If you're going through SoundJam-skins withdrawal, skinning iTunes Remote can provide an alternative fix.

2 Create Text Directives

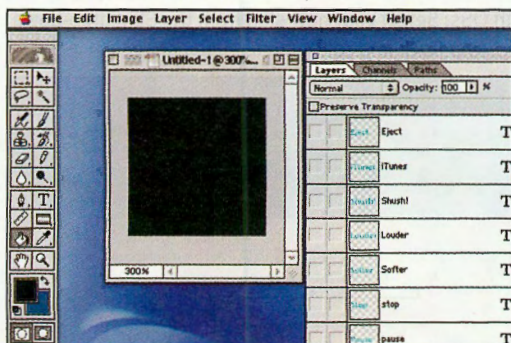
Under the Layer menu, select New, and then Layer. Pick a bold turquoise color that contrasts well with the blue button, select the text tool, choose a font and size from the Options palette (we used Charcoal at a 14-point size), click the canvas, and type *Back*—this will serve as the previous-track button. Use the move tool to center the text over the button background, and then click the Back layer's visibility icon (the eye) in the Layers palette to turn off visibility. This gives you a clean palette so you can create the other text directives on top of it. Create another new layer. Type *Play* for the play button, center the text, and turn off the Play layer's visibility. Repeat for the remaining button functions, typing *Next* for the next track, *Pause* for pause, *Stop* for stop, *Softer* for decrease volume, *Louder* for increase volume, *Shush!* for mute, *iTunes* for show iTunes, and *Eject* for eject disc.



Instead of creating 30 individual button graphics, create one multilayered document, with each button label and state in a separate layer.

3 Create Masks

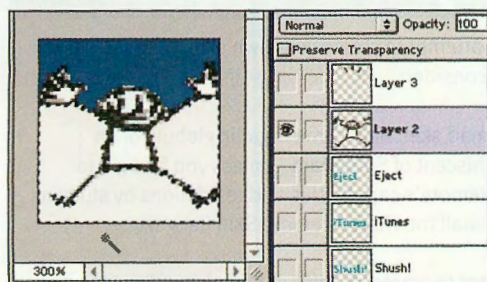
Depending on your button complexity, creating a *mask*—data that determines what parts of a graphic are visible (black retains visibility, white creates transparency)—can be easy or difficult. In this case, you want to be able to click the entire graphic, so copy it and turn it into a black mask. Drag the Background layer in the Layers palette onto the copy layer icon (the dog-eared sheet) to make a copy. Select black as the foreground color, select the paint bucket tool, and click the blue square to turn it black.



Since the buttons are square, just copy the background and color it black to create a mask.

4 Create Button States

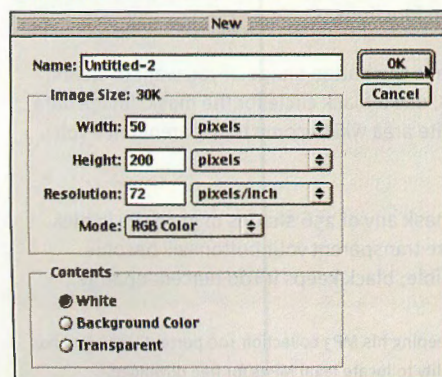
We want a graphic of our Max icon to appear during rollovers, and a subtle emotive graphic to appear over Max's head when a user clicks the button. Open *Max.tif* (on the Disc) in Photoshop, select all (Command-A), copy the graphic (Command-C), and then paste it into your skin document (Command-V). To get rid of the white background behind Max, select the magic wand tool, set Tolerance to 5 in the Options palette, click the background areas in the Max layer, and press the Delete key. Repeat this process with the emotive graphic (*emotives.tif*), and then use the move tool to center the graphic over Max's head.



After adding the Max graphic, get rid of its white background, using the magic wand tool.

5 Create a New Document

Now for the time-consuming part. You'll composite each button's three states and the mask into one graphic. This grouping needs to be laid out in this exact order (from left to right): normal, rollover, active, and mask. Select New from the File Menu. Enter

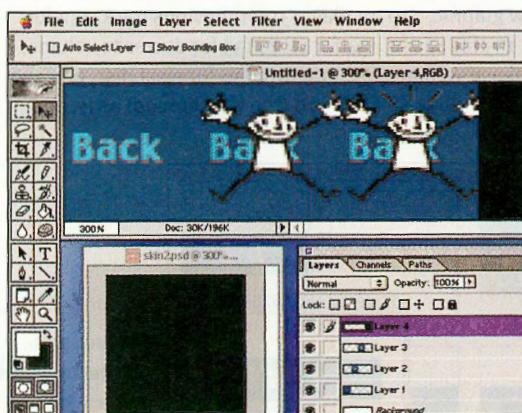


50 pixels for Height, 200 pixels for Width, and 72 pixels per inch for Resolution, and then click OK. Zoom in 300 percent.

Create a new Photoshop document to build combo graphics for all ten buttons.

6 Build Combined Graphics

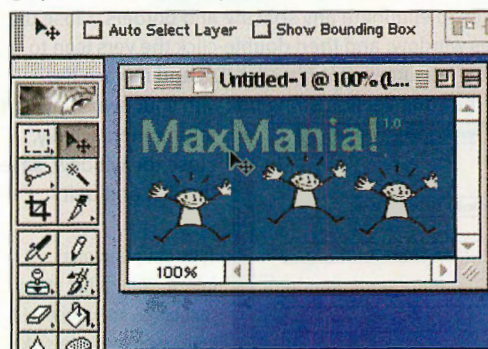
Go back to your skin file. Turn on visibility for only the Background and Back layers to create the normal state. Click either of these layers, select all (Command-A), select Copy Merged from the Edit menu, and paste the button into the new document. Use the move tool to place it flush to the left side. To create the rollover, return to your skin file and turn on the Max layer's visibility so that the Background, Back, and Max appear. Select all, select Copy Merged, paste this button into the new document, and move it next to the normal button. For the active state, in the skin file, turn on the Emotives layer's visibility (Background, Back, Max, and Emotives are now visible), select all, select Copy Merged, paste this button into the new document, and move it next to the rollover button. Then turn off visibility for all layers except for Mask (the black square), select all, copy it, and paste it into the new document, moving it flush to the right. Save this combined graphic as *Back.psd*. Repeat steps 5 and 6 for the other nine buttons.



Paste each button's three states and the mask into a new graphic, which will ultimately serve as a skin resource.

7 Create a Preview Graphic

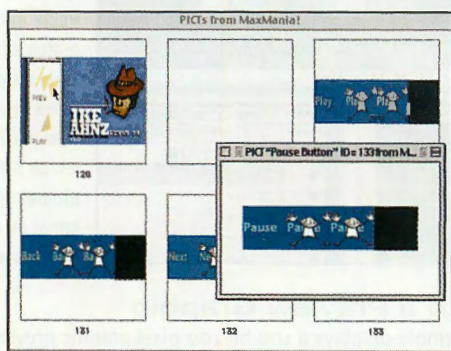
iTunes Remote displays a 100-by-200-pixel graphic preview of a selected skin in the Preferences dialog box. How you use the real estate is up to you, but the space should provide an overview of your design and the skin's name. In Photoshop, select New from the File menu, enter 100 pixels for Height, 200 pixels for Width, and 72 pixels per inch for Resolution, and then click OK. Pick the same dark blue color you used for the buttons, select the paint bucket tool, and click the canvas to color it. Then open your original skin file (the multilayered file). Turn on visibility for the Background, Max, and Emotives layers only; select all (Command-A); select Copy Merged from the Edit menu; go to the preview window, and paste in the graphic three times (Command-V). Move each Max anywhere you like. Select the text tool. Choose a font, size, and color, and then click the canvas. Type *MaxMania!*, move it toward the top left, and save the graphic as a Photoshop file.



Create a preview graphic that users can view in the iTunes Remote Preferences dialog box before applying the skin.

8 Paste Graphics into ResEdit

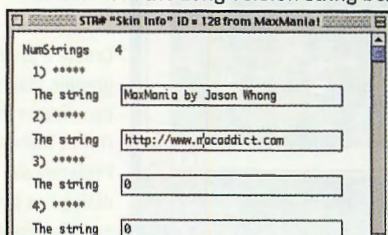
Rather than create the picture resources from scratch, paste your Photoshop graphics over an existing skin's picture resources in ResEdit. Download the iTunes Remote Skin Pack 1, click the ike ahnz skin, and duplicate the file (Command-D). Name this file *MaxMania!*, and then drag it onto the ResEdit icon to open the skin's main resources window. In Photoshop, open the combined graphic you created for the play button, select all (Command-A), and then select Copy Merged from the Edit menu. Go back to the skin's main resource window (ResEdit), double-click the PICT icon to open the pict resources, double-click PICT ID 130 (the play button's pict resource), and paste in your new graphic to replace the original. Repeat with the other nine combo button graphics and with your preview graphic, as follows: PICT ID 128 for the preview graphic, 130 for play, 131 for previous track, 132 for next track, 133 for pause, 134 for stop, 135 for decrease volume, 136 for increase volume, 137 for mute, 138 for eject disc, and 139 for show iTunes. Leave PICT ID 129 (the background) as is, and close the PICT window.



Copy and paste your button graphics over any existing skin instead of creating them all from scratch.

9 Give Yourself Credit

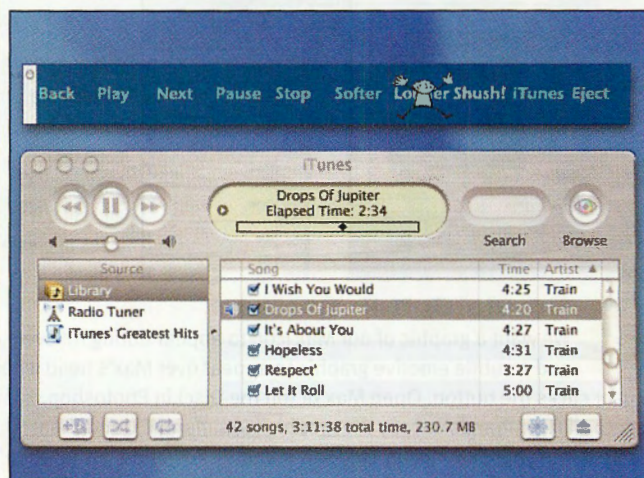
After putting in all this hard work, stake your claim to fame by entering your personal info in the string resources. In your skin's main resources window, double-click the STR# icon to open the string resources, and then double-click STR# ID 128. In the top box (next to 1), type the skin's name (in this case, *MaxMania!*) and add your byline. Don't get wordy; the box only displays up to 30 characters. In the second box, type your Web site's URL if you wish. The other two strings affect your skin's layout—the third box sets the pixel space between each button, and the fourth box sets the margin spacing between the buttons and the remote's edge. Since we designed our skin to show buttons with no trace of a background, type 0 (zero) in the third and fourth boxes to eliminate any spacing and borders. Close the string resources window, and then double-click the vers icon to open the version resources. Double-click ID 1 and replace the information in the Long Version string box with your own copyright information. Finally, close the window, save the file, and quit.



Type your personal information in the string resources so people will know who made this skin.

10 Skin the Remote

Move your new skin into the iTunes Remote Skins folder, and launch iTunes Remote and iTunes. Mac OS X users: Control-click the remote toolbar and select Preferences from the contextual menu to open the dialog box. Mac OS 9 users: In iTunes Remote, select Preferences from the Edit menu to open the dialog box. Both OSs: Select your new skin from the Skin drop-down menu and click Save. Rock and roll!



Dance, Max, dance! We didn't know you liked Train.

More Ways to Skin a Remote

Before you attempt to create your own skin, here are a few things to consider:

- You could go mad sketching some organic globule of an interface reminiscent of SoundJam—unless you first get to know iTunes Remote's capabilities and restrictions by studying other skins (install the iTunes Remote Skin Pack 1).
- If you don't want to create 30 different graphics (three states for each of the ten buttons), forego creating rollovers and active states and just paste three copies of the normal button when you combine graphics.
- Consider using graphics or a combination of text and graphics to symbolize button functions.
- The mask determines the button shape. If you want to create, say, round buttons, use a black circle for the mask. Image data that falls in the white area will become transparent once you compile the skin.
- You can assign a mask any of 256 shades of gray; the lighter the shade, the more transparent your button will become. White turns it invisible; black keeps it 100 percent opaque.

Jason Whong excels at keeping his MP3 collection 100 percent legal, and has an uncanny ability to locate legal MP3s for free download.

Make an OS X Slide-Show Screen Saver

by Jason Whong



WHAT YOU NEED

- Mac OS X
- Digital images

Ever since Sierra killed Berkeley Systems' After Dark screen-saver package, shortly after it was found to be incompatible with Mac OS 9, screen-saver use has declined in the Mac community. You can blame the prevalence of power-saving monitors and LCD screens, which pretty much made screen savers irrelevant. Then again, we miss the entertainment value of Flying Toasters and Bad Dog carousing on our desktops.

In Mac OS X, Apple has addressed this craving by throwing in some extra eye candy (as if the Genie wasn't enough) with its collection of screen savers. This includes a beautiful photographic slide show of nature images, which takes advantage of the OS's built-in graphics routines. Suddenly, OS X users everywhere started setting their Macs to Never Sleep just so they could show off the images to their friends.

While Apple's offerings of trees, leaves, and ladybugs are certainly pretty to look at, why not use the technology to satisfy your own tastes by customizing OS X's slide-show screen saver? You can make slide shows of anything: vacation pics, your photo portfolio, or even incriminating images of your intoxicated boss at the company party—the choice is yours. It's easy. Here's how to do it.

1 Round Up the Pics

Create a new folder to serve as your image bank, and fill it with any type of image file (JPEG, TIFF, PICT, and so forth), folders of pics, or aliases to those files or folders. These images can come in any size, resolution, or color mode. In the screen saver, each picture displays for roughly 8 seconds, so if you want to stay reasonably productive, don't use more than 40 pictures—once you see a photo twice, you'll know it's time to get back to work!



Create a target folder and drag in whatever you want to see in your slide show—your favorite images, folders of images, or aliases thereof.



PHOTOGRAPH BY KRIS FONG

OS X's slide-show screen saver can display any digital image regardless of file size or type.

2 Place Your Order

The slide-show screen saver doesn't display pictures randomly but calls them up in alphabetical order. If you want to dictate this order, rename the files and/or folders in the image-bank folder to create an alphabetic or numeric sequence (numbers come before letters). If you have a lot of pics, group them



by creating new folders within the image-bank folder, divvying up the images by subject matter, and placing them into the respective folders. Then rename the folders as you wish.

If you don't want family photos in your nature portfolio, create a hierarchy by renaming files or folders numerically or alphabetically.

3 Set Up the Screen Saver

Under the Apple Menu, select System Preferences. Then click the Screen Saver icon to open the window. Click the Screen Savers tab and select Slide Show from the menu. Click Configure, navigate to your image-bank folder, and click Open. Your image bank is now the default folder for the screen-saver app, and the Slide Show window will begin to show you a small preview of your images. Simply close the Screen Saver window and enjoy the show! Anytime



you want to edit your slide show, just add or remove images in your image-bank folder.

Once you select a target folder of images, the Screen Saver window gives you a preview.



PHOTOGRAPH BY W. B. JONES

Make Music Without Instruments

Check your Les Paul at the door—these days, all you need is a Mac to make music.

Saving every crumpled dollar just to buy gear while subsisting on Top Ramen and 50-cent burritos used to be the starving musician's initiation into the music industry. Any money scraped up was quickly spent on time in the recording studio, CD packaging, and more instruments. This typically added up to thousands of dollars every year. These days the situation is a lot easier on the pocketbook for musicians and wanna-be musicians; all you need is a Mac and some software (and many apps won't even cost you a penny!). No instruments, no recording-studio time, no music ability—no Top Ramen.

Of course, talent is what ignites a successful music career (if that's your aim), but if you're looking for a way to make music on the cheap—whether you're a seasoned musician, you're looking for a way to make music on a Mac, or you've never made music at all—here's how anyone can do it without instruments. We'll show you how to create samples to replace real instruments, how to map samples to a keyboard to play melody lines, and how to play music using virtual-instrument plug-ins.

Before You Go Sample Crazy...

If you decide to sample someone else's music and then use it to create your own song, you cannot legally use your song for commercial purposes, distribute it, or even play it live without first getting permission from the copyright holder and the publisher. Keep in mind that you'll also ultimately have to pay royalties to the respective parties.

Also, if you want to play or sequence samples in a host program, make sure you convert your sound bytes to an AIFF, WAV, or Sound Designer II (SDII) file format, or the host application won't be able to play them.

In This Section

p73 Create Samples and Kiss Instruments Good-Bye

You can record just about anything to create a sample that can substitute for an instrument. Get the basics on how to create a sample from any sound source.

p74 Use Samples to Create Melodies

Once you've built up your sample library, put it to good use. We show you the introductory basics of how to map samples to your Mac's keyboard, and then use the keys to play notes just as you would on an instrument.

p76 Play Virtual Instruments

If you're looking for instant gratification, virtual instruments can help you create music quickly and painlessly—no skill required. Find out how now.



Find SndSampler 4.5.2, VSamp 3.2.5, Ugly VSTI 1.0, OMS 2.3.8, and demos of Cubase VST 5.0, Retro AS-1 2.1.2, Unity DS-1 2.1.3, Phrazer 1.0.2, and Voodoo 1.2 on the Disc.

Create Samples and Kiss Instruments Good-Bye

by Krls Fong



WHAT YOU NEED

- SndSampler (on the Disc)
- iTunes
- Music to sample (optional)

Puff Daddy, P. Diddy—whatever you call him—does it. So do the Beastie Boys, Eminem, and Run DMC. What do these musicians do? They sample other people's music to create their own. Samples are essentially audio-recording snippets you can sequence together to create music; some can even replace instruments. These recordings can be anything from an entire musical phrase (like Dido's song "Thank You" used in Eminem's "Stan"), to a one-note sample of, say, a snare-drum hit or a bowed violin note. Recording short, one-note samples and sequencing them (like in Cubase) is the best way to generate melody lines that mimic instruments.

For example, you can import a one-note violin sample into a sequencing app and generate symphonic lines from that one note. But first you've got to know how to create a sample. Here's a primer.

1 Find Something to Sample

Comb through your CD collection and MP3s and find a cool, short sound; maybe an edgy synth line, a pristine piano note, an interesting vocal scat, or a monster guitar chord. Or look around the house for ways to create interesting sounds, like blowing into a bottle, ringing the doorbell, or clinking two crystal glasses together. Or you could simply hum a note. Whatever you do, find or create a sound that's very short in duration, like a single note, one chord, or one percussive hit.



PHOTOGRAPH BY KRIS FONG

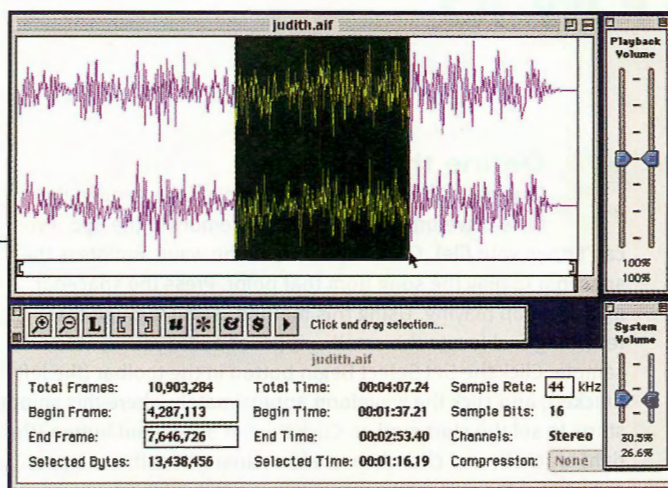
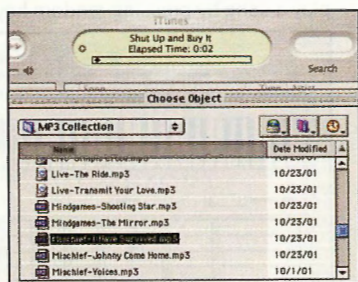
Be creative when looking for things to sample—the more melodious or percussive the sound source, the more mileage you'll get from it in the future.

2 Record or Capture the Sound

How you sample a sound depends on your sound source. You can capture sound from a CD or MP3, or record it using a mic.

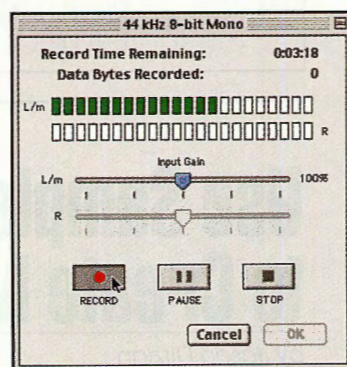
MP3 Samplers Launch iTunes, select Preferences under the Edit menu, click the Importing tab, select AIFF Encoder from the Import Using drop-down menu, and click OK. From the Advanced menu, select Convert To AIFF. In the dialog box that appears, navigate to the MP3 file you want to sample and click Choose. After iTunes converts it, locate the file and rename it with the sound you're going to sample from it.

For sampler compatibility, convert an MP3 into an AIFF file.



Record anything and isolate single notes or chords to create samples.

Sample Creators Open the Sound control panel, click the Input tab, click either the Built-in Mic or an External Mic source, and close the window. Launch SndSampler and select New Recording from the File menu. In the dialog box, select Built-in from the Input Device drop-down menu, either Built-in Mic or External Mic from the Input Source drop-down menu, and click OK. Check sound levels by generating sound from your source (clink, beat, hum, and so forth). Keep the levels in the green, though a little yellow is OK; raise or lower the Input Gain slider accordingly. When the levels are good, click Record, make your sound, click Stop, and then click OK. Press the spacebar to hear your sound. If all's well, save your sample as an AIFF file.



Record your own samples via a microphone for the most diverse (and legal) usage.

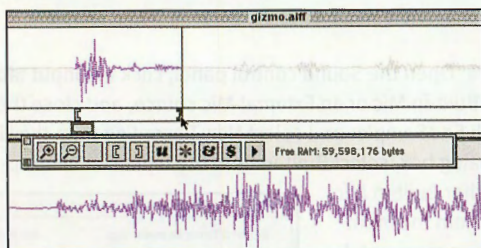
CD Samplers Load your CD and launch iTunes. From the Edit menu, select Preferences. Click the Importing tab, select AIFF Encoder from the Import Using drop-down menu, and click OK. Click your audio CD in the iTunes window, and then drag the song you want to sample into your iTunes Library. After iTunes imports it, locate the file on your hard drive and rename it with the sound you're going to sample from it—for example, distorted guitar.aif.



Sampling sounds from CDs can help you build a great-sounding sample library quickly.

3 Define the Sample

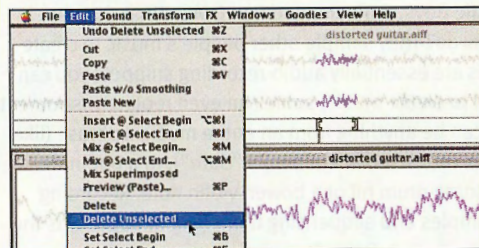
Drag your AIFF onto the SndSampler icon to open the file's waveform (allocate more memory to the app if you can't open your file). Click anywhere on the wave and press the spacebar to play the song from that point. Press the spacebar again to stop playing. Using this method, scroll through the recording and locate the small snippet of audio you want to sample. Click the Set Select Begin button in the toolbar (the left bracket), and click the waveform approximately where this snippet starts to set the start marker. Click the Set Select End button (the right bracket), and click the waveform area where the snippet ends to set the end marker.



Set markers to isolate the beginning and end points of an audio wave. Here we're isolating a cat's meow.

4 Trim the Garbage

Press the spacebar, and SndSampler plays just the selection. To fine-tune your selection (use the magnifying glass to zoom in on the wave, which displays in a second window), drag the set markers or press the arrow keys (left and right for the start marker, up and down for the end marker), and then press the spacebar until you hear only the isolated note or sound. Make sure you don't clip off the note's beginning or end, and don't include any dead air before or after the sound. When you're satisfied, from the Edit menu select Delete Unselected to isolate your sample completely, and then save it. That wasn't too bad, was it? Good—now go create a bunch more.



Once you've isolated the sound you want to sample, delete the unselected parts and save your new sound.

Use Samples to Create Melodies

by Jason Ditzian



WHAT YOU NEED

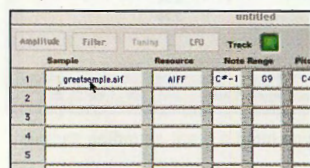
- VSamp (on the Disc)

Turn your computer keyboard into a pseudo synthesizer with VSamp and some samples.

Now that you have samples, you need some type of sample-supporting device to play them. In the hardware world, samples are typically *mapped* or assigned to specific keys on a synthesizer keyboard, which you can then play to create a melody. In the virtual world, you can use software to emulate a sample-supporting synth. One we like is VSamp, a software-sampler tool that allows you to play samples from your computer keyboard and create some funky music. Here's how.

1 Load Your Sample

Launch VSamp and drag your sample into the VSamp Instrument Editor window. The app places the sample on the first line and displays a bunch of letters and numbers across the value fields. These fields, arranged in columns, give you information about the sample, such as the sample's name and its file type. We'll deal with a few other fields in a moment. From the Play menu, select Load Instrument and then MIDI Channel 1 to load

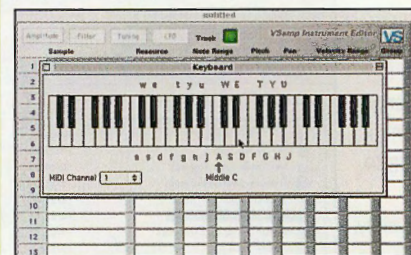


the sample (see "What Is MIDI?," p77, for more information).

Drag any AIFF file into the VSamp Instrument Editor window to view info about the sound.

2 Play the Sample

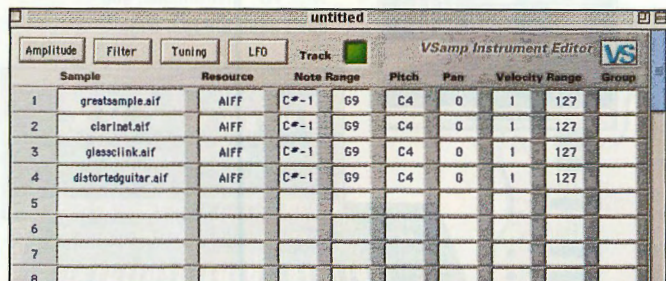
From the Window menu, select Keyboard to open the virtual keyboard. Then click and hold the Middle C key to hear your sample. Press another key to hear your sample shift in pitch (now you know how studios make dogs sing "Jingle Bells" in commercials!). The letters above and below some of the virtual keys correspond to your computer keyboard. VSamp's Middle C key has an A under it—press Shift-A on your computer keyboard to hear your sample play at a middle C pitch. Likewise, press the lowercase j key to hear your sample play at a B note pitch below middle C, or lowercase u to hear a Bb/A# note pitch. You may need to hold down a key (or a mouse button) to hear the sample in its entirety. Try to play a song by pressing random keys on either keyboard.



To play your sample, click and hold a virtual key, or press a mapped key on your computer keyboard.

3 Add More Samples

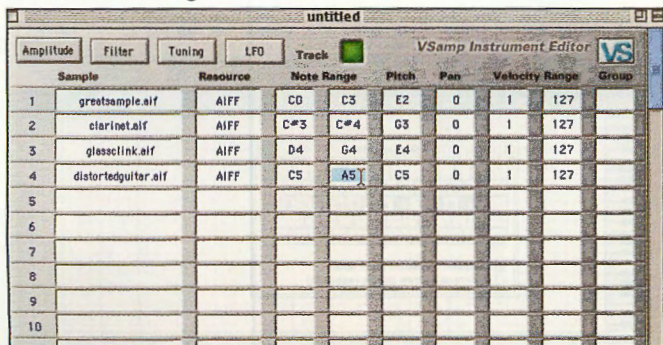
To get more bang out of VSamp, load more samples by dragging AIFF files into the VSamp Instrument Editor window and selecting Load Instrument from the Play menu each time you add one (see "Get Free Samples," below, if you want more samples but are too lazy to make them). Drag in sounds that complement your original sample.



Add more samples via drag and drop that complement your original sample—OK, so maybe our choices are a bit Zappa-esque.

4 Map Samples to Keys

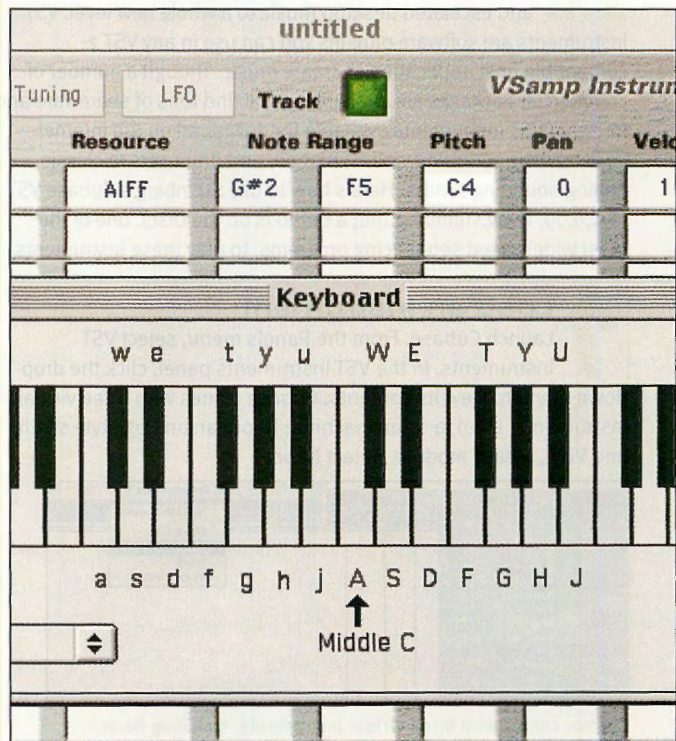
When you try to play your newly loaded samples, all of the samples will play at the same time on every key press. However, by setting the Note Range you can assign, or map, specific samples to play only when you press a specific key or keys. A letter-and-number combo (C4, E5, F3, and so forth) represents each key on a virtual or MIDI keyboard; the letter stands for the note and the number represents the octave as it appears on a standard piano keyboard. For example, middle C is C4, C5 is an octave higher, and the key directly to C5's left is B4. All you have to do is tell the program which key should trigger which sample. To map a sample to play only when you press the middle C key, type C4 in both fields under Note Range. If you want to include one white key lower and higher than middle C, type B3 in the Note Range's left field and D4 in its right field. You've now mapped your sample across four keys (the range also includes C#, the black key between C and D). Map your remaining samples by entering key values in the Note Range fields without any overlap, so that a different key or range of keys triggers each sample. You can map samples anywhere on the virtual keyboard, but to maintain the sample's true pitch, change its Pitch value. For example, if you map a sample's note range from D8 to B8, the transposition will make your sample sound squeaky since the Pitch default is C4 (middle C). But if you change the Pitch's key value to fall in the center of the note range (F8, say), your sample will sound normal again.



To map a sample onto a key or range of keys, type a low-key and high-key value in the Note Range fields.

5 Set an Ultimate Range

Mapping each sample to a different key or a limited range of keys works fine for sound effects, drum sounds, or spoken words, but samples that are melodic in nature, such as a single instrument or vocal note, should be given a greater range. Create a new VSamp instrument (Command-N), then drag a melodic sample into the window and load it. In the Keyboard window, play each key to hear the sample at different pitches. You'll notice that at certain points in both the lower and higher ranges, your sample won't sound good. Determine the lowest and highest sample notes that fall in the decent category, and enter these key values in the Note Range fields. You'll be able to play on all keys between and including the two notes, but all keys that fall outside the range will be silent.



Set a sample's note range by ear if you want to isolate the broadest range of good-sounding pitches.

Get Free Samples

The Internet is filled with hundreds of Web sites that offer audio samples free for the download. Here are some of the best of 'em.

The Drum Samples Page <http://spec.ch.man.ac.uk/~ashley/drums.html>

SampleNet www.samplenet.co.uk

Analogue Samples www.analoguesamples.com

Tweakheadz Lab www.tweakheadz.com/samples.html

Home Recording Central www.dbmasters.net/hrc/index.php

FreeSamples www.freesamples.de

Digimpro www.digimpro.com

Sample Direct <http://internettrash.com/users/sampledirect>

Top 100 Audio Sample Sites <http://new.topsitelists.com/bestsites/topaudiosamples/topsites.htm>

Play Virtual Instruments

by Jason Ditzlan



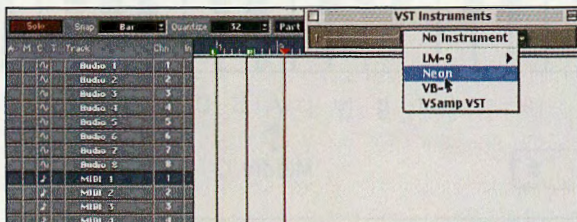
WHAT YOU NEED

- Cubase VST (demo on the Disc)

N When Steinberg developed version 2 of VST (Virtual Studio Technology), it introduced virtual instruments to the world and escalated desktop music to a whole new level. VST instruments are software plug-ins you can use in any VST 2-compatible host application to create music. Though a number of commercial packages are available, you'll find tons of shareware and freeware VST instruments available for download on the Internet—from realistic-sounding violins, pianos, and drum sets to classic analog-sounding synths. Here's how to use Steinberg's Cubase VST (\$449.99, www.steinberg.net; a demo is on the Disc), one of the most widely used sequencing programs, to play these instruments.

1 Load an Instrument

Launch Cubase. From the Panels menu, select VST Instruments. In the VST Instruments panel, click the drop-down menu to view its contents. Cubase comes with three virtual instruments: LM-9, a drum machine; Neon, an analog-style synth; and VB-1, a bass module. Select Neon.



Cubase comes with three virtual instruments, including Neon, an analog-style synthesizer.

2 Create a New Part

Before you can play a virtual instrument, you need to assign a track to the sound. In the Arrange window, click the MIDI 1 track to select it, then press Command-P to create a new part. A MIDI bar will appear to the right.



Create a new MIDI part to support a virtual instrument—just select a MIDI track and press Command-P.

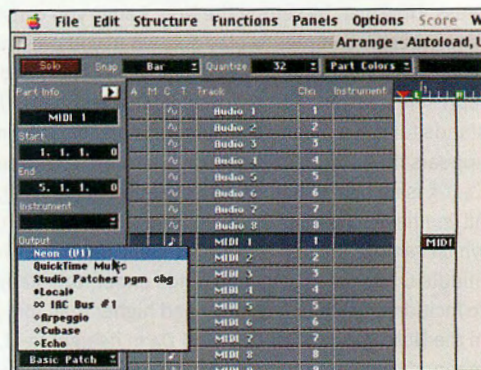


With VST Instruments, you don't need the real deal.

3 Route Neon

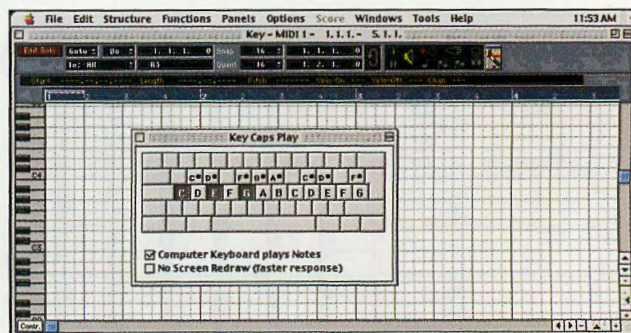
Click the arrow button in the bottom-left corner of the Arrange window to open the Part Info palette. From the Output drop-down menu, select Neon.

To route Cubase to the Neon synth, select Neon from the Output drop-down menu in the Part Info palette.



4 Play the Instrument

In the Arrange window, double-click the part (the MIDI bar) to open the keyboard window. Click and hold a key on the vertical keyboard to hear the Neon synth. To play sounds from your computer keyboard, select Key Caps Play from the Panels menu. Check the Computer Keyboard Plays Notes box, and then press and hold any of the corresponding lettered keys to play that note. The longer you hold down a computer key, the longer the note's duration. Hold down two or more keys to play chords.

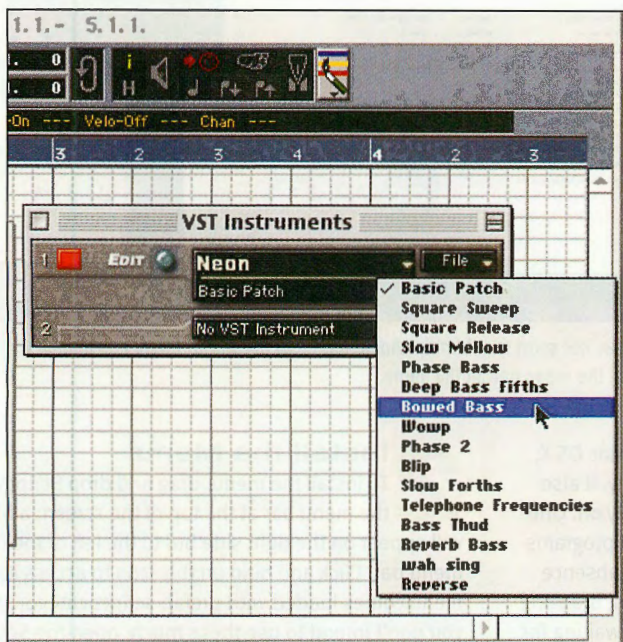


Open the Key Caps Play panel to play virtual instruments on your Mac's keyboard. We're playing a C major chord here.

5 Change Instrument Sounds

To hear a virtual instrument's alternative sounds, change the patch in the VST Instruments panel. Click the patch's drop-down menu (under the desired VST instrument), select any patch, and play away.

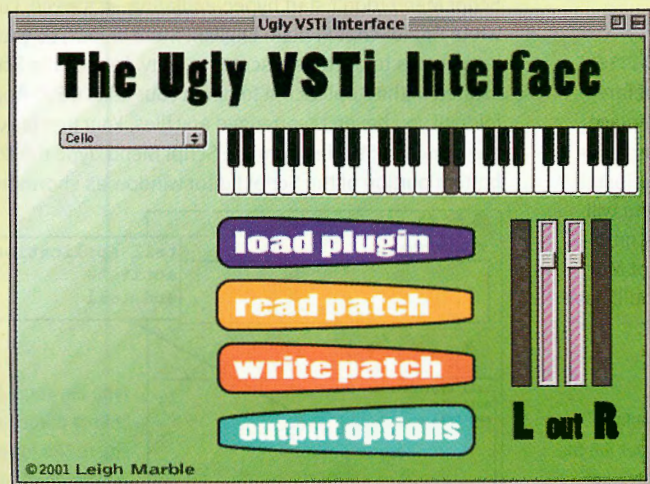
Change the sound of any VST instrument by selecting a different patch in the VST Instruments panel.



Hey, Cheapskate, Play Virtual Instruments for Free

Steinberg, the maker of Cubase, is the VST instrument plug-ins guru, and Cubase is the most widely used app for hosting them (duh, Steinberg developed the technology). However, if you aren't quite ready to shell out the clams for Cubase and are just looking for a way to play virtual instruments, you have a much cheaper option—Leigh Marble's Ugly VSTi Interface (www.netSPACE.org/%7Eleigh/max). This free app does nothing but host VST instrument plug-ins, and is one of the easiest apps for playing VST instruments on your Mac. And if you're looking for virtual instruments, you'll find tons of links to VST plug-ins on the Cubase Zone Web site (www.synthzone.com/cubase.htm).

Ugly? Almost. Functional? You betcha! But the best part? Ugly VSTi Interface is also free.



What Is MIDI?

by Kris Fong

For those of you unfamiliar with digital-music sequencing, MIDI (Musical Instrument Digital Interface) is a protocol that allows you to synchronize MIDI-compatible hardware devices and software—like synthesizers, your Mac, drum machines, synthesizer modules, and multitrack recorders—and trigger them via a master controller. Originally introduced in 1983, MIDI lets anyone essentially be a one-man or one-woman band.

MIDI is a two-way pipeline allowing linked devices to share information. A sound shuttled through MIDI appears as a series of numbers representing the individual characteristics that make up the note, such as its pitch, volume, and sustain (length).

You can set up a MIDI system to play sounds from multiple devices via one controller. For example, say you have two MIDI-compatible keyboard synthesizers, a drum machine, and a synthesizer module (a hardware device filled with samples). You can daisy-chain them, set up one of the keyboards as the master controller, and play sounds from all four devices via that keyboard.

Your Mac is built to support MIDI, though you need to invest in a hardware MIDI interface if you want to connect any devices to it. The Mac also requires a virtual MIDI interface to link software synthesizers, samplers, drum machines, and audio sequencers. If you're using Mac OS X, you already have Apple's OS X MIDI installed. For audio apps that aren't OS X compatible, OMS (Open Music System, free, www.opcode.com) and FreeMIDI (free, www.motu.com) are the two most common MIDI system extensions for the Mac; you'll usually find one of them packaged with any audio-recording or -sequencing package.

If you're looking to become a true virtual musician, BitHeadz (www.bitheadz.com) has some great virtual instruments. Check out Retro AS-1 (a software synthesizer, \$259), Unity DS-1 (a software sampler, \$449), Phrazer (a real-time audio-loop sequencer, \$299), and Voodoo (a sampler drum machine, \$199). If you don't want to spend a penny but still want to make music, you can use Apple's QuickTime Musical Instruments—essentially samples—in just about any sequencing program. They offer a wealth of diverse instruments (pianos, strings, percussion, guitars, synth pads, and more) for making music.

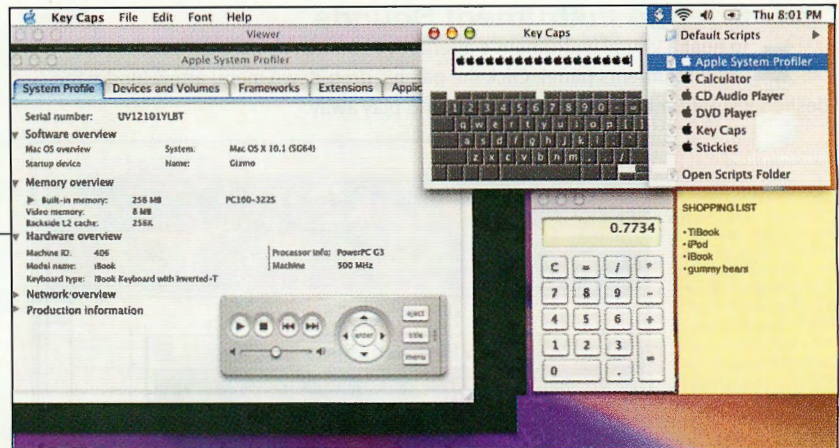
Create an App-Launching Menu

by Jason Whong



WHAT YOU NEED

- Mac OS 10.1
- AppleScript and Script Editor
- Apple's Script Menu for Mac OS 10.1 (www.apple.com/applescript/macosex/script_menu)



It may not sport that familiar Apple logo, but our Script Menu can launch apps from the menu bar all the same.

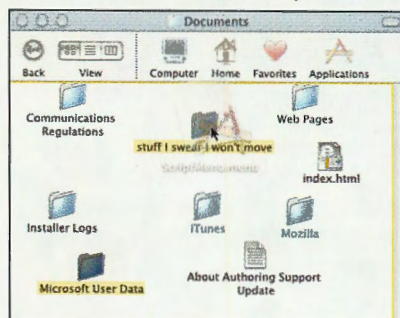
When Apple made the great leap forward to Mac OS X, it introduced some amazing new technology. It also eliminated a few features we've come to rely on. One of the features we miss the most is the ability to launch programs from the Apple menu. In OS X, you can work around its absence somewhat by creating a folder full of application aliases, dragging it to the Dock, clicking the folder's Dock icon, and then waiting for your Mac to open the folder's hierarchical contents anytime you want to launch an app. But if rummaging through a cluttered Dock to access, say, the Calculator or Stickies six times a day leaves you fondly reminiscing about OS 9, there *is* hope—and it lies in the Script Menu.

Introduced back in the age of Mac OS 8.5, Apple's Script Menu, which appears on the right side of the menu bar, provides prolific AppleScript warriors with a menu just for launching AppleScripts. However, you can also use it in OS 10.1 to launch applications—not exactly what Apple intended, but hey, why not use it to our advantage? It's not the same as the old Apple menu you've come to cherish, but it's often faster than launching apps via the Dock, since the system keeps Script Menu items in memory.

If you long for the good old Apple-menu days, here's a way to indulge your nostalgia—sort of. (Note: Though this tutorial is intended for OS X users, these scripting techniques work in older Mac OSs, too.)

1 Give the File a Permanent Home

Download Script Menu from the Apple site, but before installing it, store the ScriptMenu.menu file someplace safe on your hard drive. Swear to yourself that you'll never move it from that hallowed location. If you move this file *after* you install

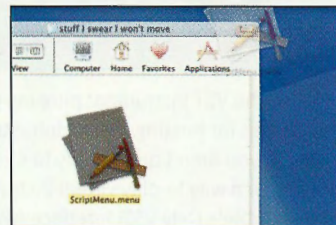


it, Script Menu will uninstall the next time you boot Mac OS X, and you'll have to reinstall it.

Once you download Script Menu, put the file someplace safe and vow never to move it.

2 Install the Menu

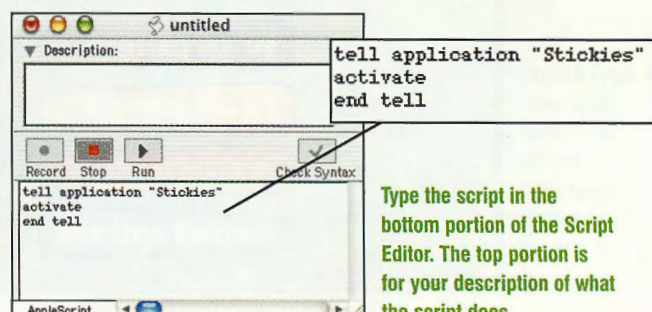
To install the menu, drag and drop ScriptMenu.menu onto the menu bar at the top of the screen; a black script icon will appear on the right side but to the left of the other icons in the menu bar. Click and hold on this icon to access its menu items. The menu comes loaded with prefab scripts categorized into folders. If you don't intend to use these much, open the Scripts folder in the Library folder, create a new folder, give it a name like Default Scripts, and dump all the script folders into it. This clears the menu list so you can access your custom app launchers more readily, but it keeps these prefab scripts handy.



To install Script Menu, simply drag the ScriptMenu.menu file onto the menu bar.

3 Write an AppleScript

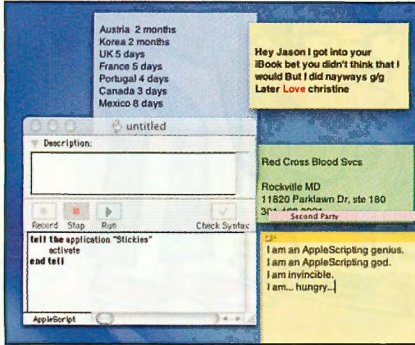
OK, now comes the tricky part. You need to write a separate AppleScript for every application you wish to launch via Script Menu (don't start hyperventilating—it's easy). Luckily, Apple wrote AppleScript in plain English, more or less, so you don't need to be a genius to become a scripting deity. Launch the Script Editor—located in the AppleScript folder in your (Mac OS X) Applications folder if you haven't rearranged any files. Your first task is to enable the launch of Stickies from the Script Menu. Type the script into the bottom portion of the Script Editor window as shown below.



Type the script in the bottom portion of the Script Editor. The top portion is for your description of what the script does.

4 Format the Script


Click Check Syntax to arrange the text into proper scripting format. If you made any spelling or syntax errors, an alert box will inform you—correct the mistakes (make sure you type the script exactly as displayed in our screen shot), and then click the Check Syntax button again until the script formats correctly. Then click Run to launch Stickies. If it doesn't launch, check to make sure you still have

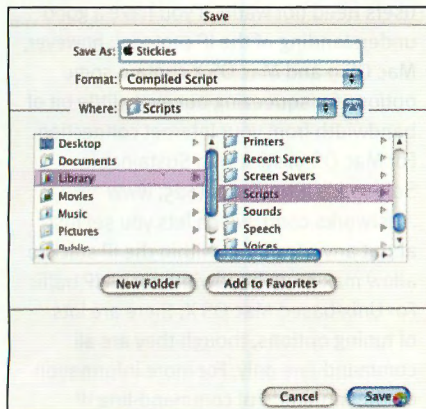


Stickies on your hard drive and you didn't rename it. Quit Stickies when all looks good.

If you type everything exactly as shown and the script formats correctly, Stickies will launch when you press the Run button.

5 Save the Script

Select Save from the File menu. In the dialog box, type a script name in the Save As field (we miss the Apple menu so much that we added a  before our script name by pressing Shift-Option-K). Then select Compiled Script from the Format drop-down menu, navigate to your user Scripts folder in the Library folder, and click Save.



Save your new script in your user Scripts folder to make it accessible via the Script Menu.

6 Launch the App

To launch the application, simply select any script from the Script Menu. To add other apps to the Script Menu, repeat steps 3 to 5, but in the Script Editor replace the application name (in quotes) with the exact name of any other desired program (also in quotes), and save the script with a new name.



Just like the ol' Apple menu—Stickies (or any other application for which you create a script) is now a mere click away.

Jason Whong chooses to remain an AppleScript hobbyist, which is why he's a writer and not a software developer.

Launch Multiple Applications



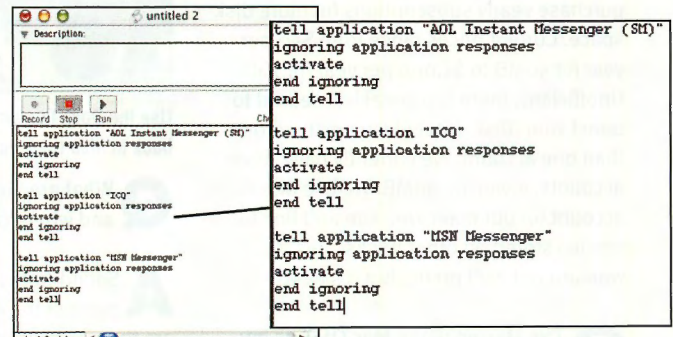
WHAT YOU NEED

- Mac OS 10.1
- AppleScript and Script Editor
- Apple's Script Menu for Mac OS 10.1 (www.apple.com/applescript/macosx/script_menu)

If you find yourself working in multiple programs on a daily basis, you can create a more complex script to launch a set of apps in one fell swoop. Here's how.

1 Write the Script

To make a script launch several programs at once, just type multiple `tell` statements in the Script Editor. We created a script that launches AOL Instant Messenger, ICQ, and MSN Messenger in one click. Launch the Script Editor and enter the text in the bottom portion of the window as shown below, pressing the Return key after each command line. Substitute your own apps by replacing our app names (in quotes) with your own (also in quotes).



Type the script text as you would in a word processor—the Script Editor will format it correctly later.

The ignoring statement tells AppleScript not to wait for the application to respond before going on to the next command. This speeds up the launching process.

2 Format the Script and Save

Click Check Syntax, and then click Run to launch the script. Once you've tested the script to your satisfaction, select Save from the File menu, type a script name in the Save As field, select



Compiled Script from the Format drop-down menu, navigate to your user Script folder in the Library folder, and click Save.

After formatting the text, click Run to see your script in action.

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Q I have run out of room on my Apple iDisk. How can I add storage space?

A Ay, there's the rub of free services. Apple gives every registered iTools user 20MB of free iDisk space for storing their personal files on Apple's own Internet servers. This amount of space is just fine for Web pages and pictures, but not for iMovies. To add more space officially, you need to leave the land of the free and purchase yearly subscriptions for more disk space. Current prices range from \$50 per year for 50MB to \$1,000 per year for 1GB. Unofficially, there is a sneakier method to boost your iDisk space: Just register more than one account. We currently have three accounts, giving us 60MB. We use one iDisk account for our main Web site and link to movies stored on other iDisks. This workaround isn't pretty, but it's free.

Q I've started using Mac OS X as my main system, but I still need to boot into Mac OS 9 quite often. Is there an easier way to access the Startup Disk preferences than opening the System Preferences?

A For those of us who bounce back and forth between Mac OS 9 and OS X, quick access to the startup disk settings is essential. You can hold down the Option key at startup to choose the startup disk, but this method is awkward and slow.

Personally, we prefer to put the actual Startup Disk pane of OS X System Preferences into the Dock. OS X stores all the system preferences in the System > Library > PreferencePanes folder. Just drag the file titled `StartupDisk.prefPane` into the Dock. If the standard document icon is too unattractive for your fancy-shmancy Dock, make an alias of the `StartupDisk.prefPane` and save it somewhere on your hard drive, such as in the Applications folder. Rename

Mr. Whiskers discovered the key to free Web storage and then demanded better cat food.

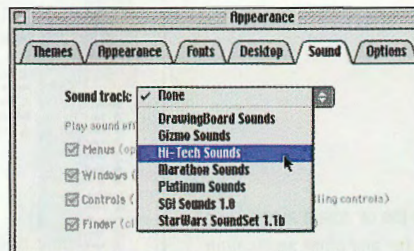
this alias and paste a custom icon onto it (see p81 to find out how to paste a custom icon in Mac OS X), and then drag that icon to the Dock.



Use the Dock to change your startup disk back to Mac OS 9 quickly and easily.

Q What are Sound Tracks in Mac OS 9, and where can I get more sounds?

A Sound Tracks, located in the Sound panel of the Appearance control panel, are the sets of Appearance Sounds you hear when you open menus, drag icons, close windows, and perform other mundane Finder actions. The ubiquitous clicks, clacks, and chimes can get really annoying, but hey, you asked. Check out Sound Set Central (www.soundsetcentral.com) to download other Sound Tracks (called Sound Sets) and to learn how to create your own sounds. For Mac OS X, check out Unsanity's shareware utility Xounds (\$7, www.unsanity.com) for downloadable sounds.



Use the Appearance Control Panel to add kitschy sounds to your Finder actions.

Q How can I get the most speed out of my TCP/IP connection?

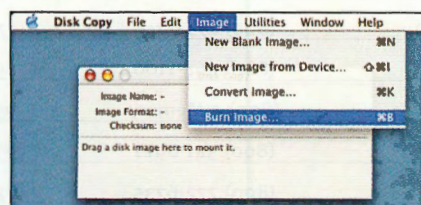
A Warning: This question falls deeply into the geek pit, where most Mac users need not wade. If you have a good understanding of the IP protocol, however, Mac OS 9 and Mac OS X contain some options for squeezing out every little bit of bandwidth from your Internet connection. For Mac OS 9, stick with Sustainable Software's IPNetTuner (\$25, www.sustworks.com), which lets you set just about any parameter within the IP stack to allow maximum bandwidth for all IP traffic. For Unix-based Mac OS X, there are lots of tuning options, though they are all command-line only. For more information on the multitude of command-line IP commands, read the informative UNIX IP Stack Tuning Guide v2.7 (www.enteract.com/~robt/Docs/Articles/ip-stack-tuning.html).

Q How can I duplicate the discs I create with iDVD?

A Since the DVDs you create with iDVD are not copy protected, you can make as many copies as you want if your Mac has a SuperDrive. Make multiple copies right in iDVD or use OS X's Disk Copy utility. To use the Disk Copy utility, insert the disc you want to copy, then launch Disk Copy from the Utilities folder in the Applications folder. From the Image menu, select New Image From Device. Then choose the disc you want to copy (usually disc 2), and save it as a CD/DVD Master. To burn a disc with the



resulting image file, go to the Image menu in Disk Copy and select Burn Image. Voilà, you're done. For other disk-imaging options, check out the Image Type and Segment Size options in Disk Copy Preferences' Imaging Panel.



It's not piracy when you own the content. Make multiple copies of your homemade DVDs with Mac OS X's Disk Copy utility.

Q Can I use FireWire to transfer files between computers?

A Yes. If your computers run Mac OS 9 and contain built-in FireWire ports, and if you have a 6-pin-to-6-pin FireWire cable to connect them, you can mount one computer's hard drive on the other computer's desktop via FireWire Target Disk Mode (TDM).

To begin, shut down the computer whose hard drive icon you want to appear on the other computer's desktop. Next, connect the FireWire cable to both computers. Restart the first computer while holding down the T key—don't release it until you see a FireWire icon onscreen. The hard disk icon for this computer should now appear on the desktop of the computer you left on. Now you can drag and drop files between the two hard disks. When you're done, drag the visiting hard disk's icon to the Trash to unmount it.

Pop Goes the Email

In our January 2002 issue (*Ask Us*, p76), we told you how to check regular POP mail accounts on the road with free Web email services. We mentioned two of the biggies, Yahoo Mail (www.yahoo.com) and Hotmail (www.hotmail.com), but *MacAddict* readers wrote in with some other Web sites that let you access your POP-based email accounts. Here they are in no particular order:

E-mailAnywhere

(www.e-mailanywhere.com)

Mail2web (www.mail2web.com)

MailStart (www.mailstart.com)

Pop3Now (www.pop3now.com)



Q I want to use my Mac, which runs Mac OS X, as a small file server. Do I have to buy OS X Server?

A While the client version of Mac OS X has limited file-sharing capabilities, you need Mac OS X Server to run and administer a traditional file server. Mac OS X Server is not a cheap solution, and it may be overkill for modest file-sharing needs. It turns out that most of Mac OS X Server's file-sharing functionality is in the client version. Apple just left out the controls for using it—specifying exact directories and changing privileges, for example. A freeware utility called SharePoints (<http://homepage.mac.com/mhorn>) lets you set up custom shared directories with special privileges in OS X, as you can do in Mac OS 9. Leave it to an enterprising developer to find a workaround.

Q Can I use custom icons in Mac OS X?

A In Mac OS 9, the true Mac addict liberally adds custom icons to his or her desktop files: Just highlight an icon, select Get Info from the File menu, and copy and paste virtually any image that fits into the little box next to the file name. In Mac OS X, the basic procedure for adding custom icons remains the same, but OS 9's Get Info dialog box is called Show Info in OS X. To find great custom icons for OS X, go to www.xicons.com, visit the Iconfactory at www.iconfactory.com, or even design your own (see "Design a Mac OS X Icon," p66).



Show me the info in Mac OS X.

Q How do I capture a screen in Mac OS X?

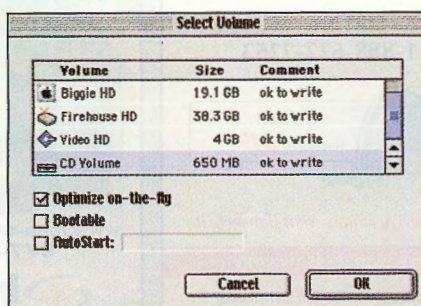
A Early adopters of Mac OS X will no doubt remember the Grab application for capturing screenshots. With its oddly grayed-out menus and lack of consistency, Grab was a poor excuse of a command

compared to OS 9's simple and effective Command-Shift-3 and Command-Shift-4. Apple must have realized the error of its ways, so it added these key combinations back into Mac OS 10.1. Use Command-Shift-3 to take a full screenshot and Command-Shift-4 to drag a marquee around a partial screenshot. The screenshots appear on the desktop sequentially as Picture 1, Picture 2, and so forth. If Mac OS X's built-in screenshot features aren't enough, go for the ultimate screen-capture utility, Snapz Pro X from Ambrosia Software (\$49, www.ambrosiasw.com).

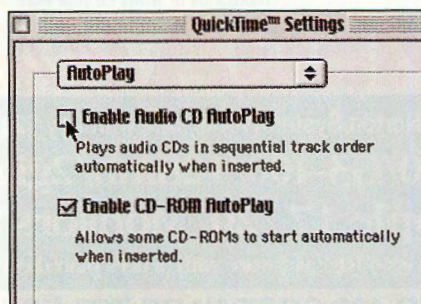
Q Is there a way to make an application on a CD automatically start up when I insert the CD?

A You can use Roxio's Toast 5 Titanium (\$89.95, www.roxio.com) to do this, but you'll have to burn your CD as a Mac volume (standard data format won't work) by holding down the Other button and selecting Mac Volume. Click the Select button. In the ensuing Select Volume dialog box, click the AutoStart check box and choose the file you want to autostart.

Should you ever tire of the CD AutoStart feature, you can tell your computer to ignore it. Open the QuickTime Settings control panel, choose AutoPlay from the menu, and uncheck the Enable CD-ROM AutoPlay check box.



Autostart an application by choosing the application and clicking AutoStart.



Here's how to turn off autostart (called AutoPlay here) in the QuickTime Settings control panel.

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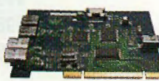
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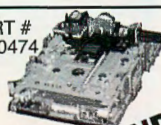
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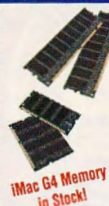
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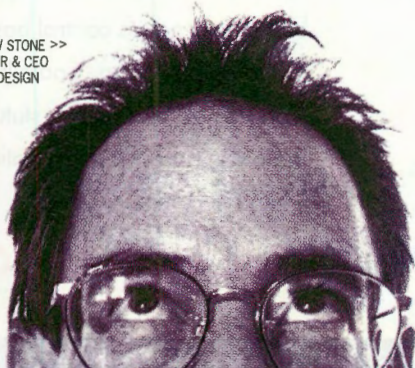
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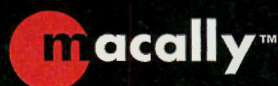
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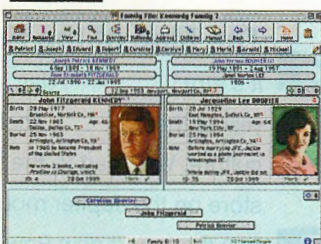
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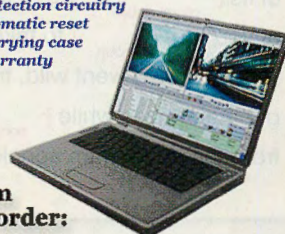
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shut down

Don't let the back cover hit you on the way out.



The Mac-Your-Own-Adventure Contest

If you've never witnessed a Mac Expo keynote address or an Apple Store opening, here's your chance to get in on the action. Fill in the blanks to craft two hilarious Mac adventure stories, then tear out the page and send both completed stories to:

The MacAddict Mac-Your-Own-Adventure Contest,
MacAddict, 150 North Hill Dr., Brisbane, CA 94005

We'll pick the best three entries and send each of their zany authors our signature get-off-the-couch kit, including a MacAddict-branded camping chair, football, beach towel, and hat. We'll announce the winners right here in the *Shut Down* section in our August 2002 issue. (No phone calls or emails, please.)

Good luck, and may the best Mac addict win.

An Unusual Keynote Address



One [adjective] morning in [place],
Steve Jobs prepared himself to give Apple's
keynote address. As the weather was unusually
[adjective] that day, he donned a(n) [adjective] shirt
and a(n) [adjective] pair of pants. To pump himself
up, he [action verb, past tense] to the tunes of
[song title] on his [noun].

At the Expo, Mac fans in the audience were
yelling "[exclamation]!" at the top of their lungs.
Steve threw a(n) [adjective] [noun] into the
audience to quiet them down. He began his
presentation by disclosing the latest developments
in [noun] technology and announced that
[software company] had recently Carbonized their
[plural noun]. The crowd reacted [adverb],
jumping up and down like rabid [plural animal].
A cameo appearance by the [job title] of
[software or hardware developer] came next. After giving
a(n) [adjective] demo, (s)he wowed the audience
by giving everyone state-of-the-art [plural noun].

The audience began to [verb] [adverb].
Jobs silenced them by saying, "But there's one
more thing. To show you just how proud Apple is
of its [plural noun], we're giving each and everyone
of you a(n) [noun] to take home today."

The crowd went wild, trampling each other to
get their prizes while [song title] played merrily
from the auditorium speakers.

The Mac of the Future



It's a(n) [adjective] day in 3003, the
year of the [animal] according to [nationality]
culture. We head to the newly opened Apple
store on the Jupiter moon [place]. Our goal: to
buy the brand-new Power [noun] with a(n)
[noun] processor. [manufacturer] abandoned the
[noun] sector to create Mac-compatible
[plural noun]. Speed tests show that the new Mac
outperforms Intel's [national monument] processor
2:1 in standard [type of liquid] filter tests.

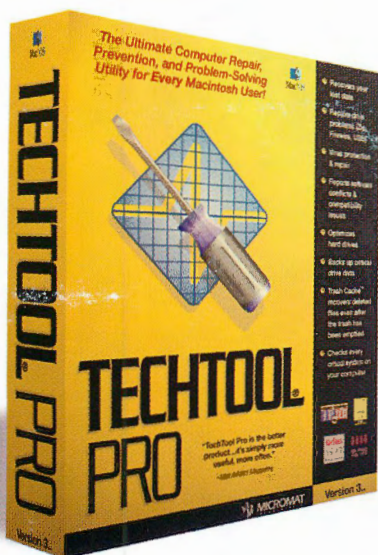
We parked our spaceship in [place] and
[action verb, past tense] to the Apple Store.
[adjective] people, [adjective] aliens, and talking
[plural noun] lined up outside. Not wanting to
wait, we vaporized everyone in line with our
[adjective] [noun] mechanism, marched
through the front door, and picked out the Mac
we wanted. Years before, Apple had abandoned
the white-and-titanium color scheme for a(n)
[adjective] [color]-and-[color] color scheme.
[famous person] said the new Mac colors were
to [action verb] for.

We returned the other patrons to their former
nonvaporized state, hopped into our spaceship,
and flew back to Earth to hook up our brand-new
Mac and play [Mac game] till the
[plural animal] came home.

CONTEST RULES:

The judges will be MacAddict editors, and they will base their decision on the following criterion: most creative stories. One entry total per individual. All entries must be received no later than May 10, 2002, with the winner announced on or around August 2002. By entering this contest you agree that Imagine Media may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes won by minors will be awarded to their parents or legal guardians. Imagine Media is not responsible for damages or expenses the winners might incur as a result of either the contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Imagine Media, Inc., c/o MacAddict Contest, 150 North Hill Dr., Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary; void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.

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For Apple's next-generation operating system, you'll need a next-generation disk utility. That's why Micromat has introduced Drive 10, the first and final disk utility for Mac OS X. Problems with your drive? Drive 10 can repair almost any drive problem with one simple click of your mouse. All within OS X's native environment.

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